WATER SUPPLY OUTLOOK FOR WASHINGTON

Prepared by

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

DEPARTMENT OF ECOLOGY STATE OF WASHINGTON

Data included in this report were obtained by the agencies named above in cooperation with the U.S. Forest Service, U.S. Geological Survey, National Park Service, and other Federal, State and Private organizations.

AS OF
APR. 1, 1973

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

U.S. DEPARTMENT of AGRICULTURE
CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY
SOIL CONSERVATION SERVICE

COVER PHOTO NUMBER ORC-286-4

USDA SCS PORTLAND, OREG 1973

WATER SUPPLY OUTLOOK FOR WASHINGTON

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

KENNETH E. GRANT

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D C

Released by

GALEN S. BRIDGE

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
SPOKANE, WASHINGTON

In Cooperation with

JOHN A. BIGGS

DIRECTOR
DEPARTMENT OF ECOLOGY
STATE OF WASHINGTON

Report prepared by

ROBERT T. DAVIS, Snow Survey Supervisor

SOIL CONSERVATION SERVICE
360 U.S. COURTHOUSE
SPOKANE, WASHINGTON 99201

INDEX to WASHINGTON SNOW COURSES, SOIL MOISTURE STATIONS and PRECIPITATION STORAGE GAGES

UPPER COLUMBIA DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Pend Oreille River					
Boyer Mountain	17A2	7	31N	43E	5250
Bunchgrass Meadow	17A1	24	37N	44E	5000
Winchester Creek	17A3	30	33N	43E	2970
Kettle River					
Boulder Road	18A2	36	39N	36E	1450
Butte Creek	18A3	28	39N	35E	4070
Cabin Creek	18A8	5	38N	36E	3170
Goat Creek	18A4	26	39N	35E	3595
Snow Caps Creek	18A5	3	38N	36E	2150
Snow Caps Trail	18A6	5	38N	36E	2720
Summit G. S.	18A7	20	39N	35E	4600
Colville River					
Baird	17A6	19	36N	42E	3215
Carlson	18A9	34	32N	38E	2885
Chewelah	17A4	11	32N	41E	4925
Stranger Mountain	17A5	26	31N	38E	4990
Togo	18A10	6	29N	38E	3370
Sanpoil River					
Sherman Creek Pass	18A1	19	36N	35E	5350
Okanogan River					
Clark	19A8a	2	36N	23E	7000
Muckamuck	19A9a	20	36N	24E	6750
Mutton Creek No. 1	19A1	30	37N	24E	5700
Mutton Creek No. 2	19A4	19	37N	24E	6000
Paysayten	20A28a	32	40N	18E	4300
Rusty Creek	19A3P	18	35N	24E	4000
Salmon Meadows	19A2PM	33	37N	24E	4500
Starvation Mtn.	19A10a	15	35N	23E	6750
Touts Coulee	19A6	30	39N	25E	2845
Methow River					
Billy Goat Pass	20A10a	10	38N	20E	6400
Dollar Watch	20A29a	8	39N	20E	7000
Harts Pass	20A5A	7	37N	18E	6500
Horseshoe Basin	19A5a	15	40N	23E	7000
Loup Loup	19A7	36	34N	23E	4650
Chelan Lake Basin					
Cloudy Pass	20A22a	12	31N	15E	6500
Greenwood Flat	20A25a	3	31N	16E	3540
Little Meadows	20A24a	8	31N	16E	5275
Lyman Lake	20A23a	18	31N	16E	5900
Park Creek Flat	20A13a	18	34N	16E	2220
Park Creek Ridge	20A12A	7	34N	16E	4600
Petersons	20A16a	3	34N	17E	3730
Rainy Pass	20A9	21	35N	17E	4780
Safety Harbor	20A30A	32	31N	20E	6300
War Creek Pass	20A31a	34	33N	18E	6500
Entiat River					
Brief	20B19	34	28N	19E	1600
Entiat Meadows	20A33a	28	31N	17E	4800
Entiat River Trail	20A34a	2	29N	17E	3150
Four Mile Ridge	20B27a	15	28N	19E	7000
Fox Camp	20A36a	17	30N	18E	6510
Pope Ridge	20B20	22	29N	18E	4300
Pope Ridge Snow Pillow	20B24SP	22	29N	18E	4300
Pugh Ridge	20A32a	34	30N	18E	6400
Shady Pass	20A37	20	29N	19E	6200
Snow Brushy	20A35a	21	30N	17E	3850
Tommy Creek	20B21a	10	28N	18E	5300
Wenatchee River					
Berne-Mill Creek	21B23	7	26N	15E	2925
Berne-Mill Creek (New)	21B41SP	13	26N	14E	3240
Blewett Pass No. 2	20B2	35	22N	17E	4270
Chiwaukum G. S.	20B16	4	25N	17E	1810
Lake Wenatchee	20B5	33	27N	17E	1970
Leavenworth R. S.	20B17	1	24N	17E	1127
Merritt	20B18	4	26N	16E	2140
Stevens Pass	21B1	14	26N	13E	4070
Stevens Pass Sand Shed	21B45	12	26N	19E	3700
Trough #2	20B25SP	10	20N	20E	5310
Colockum Creek					
Colockum Creek Upper	20B22	11	20N	20E	5300
Colockum Creek Lower	20B23	1	20N	20E	4300
Squilchuck Creek					
Beehive Springs	20B3	12	21N	19E	4400
Scout-A-Vista	20B4	18	21N	20E	3400
Stemilt Creek					
Jump-Off	20B8	34	21N	20E	4450
Stemilt Slide	20B6	30	21N	20E	5000
Upper Wheeler	20B7PM	30	21N	20E	4400
Crab Creek					
Creston-Kunz	18B1m	32	27N	34E	2440
Jack Woods	18B3m	28	27N	31E	2750
Krause	18B4m	21	27N	33E	2420
Sheffels	18B5m	17	27N	32E	2378
Sherman	18B7m	24	27N	33E	2440
Wheatridge	18B6m	24	25N	32E	2290
Yakima River					
Ahtanum R. S.	21C11	26	12N	14E	3100
Big Boulder Creek	21B9	35	23N	14E	3200
Bumping Lake	21C8	23	16N	12E	3450
Bumping Lake New	21C36	13	16N	12E	3400
Colockum Pass	20B9	25	20N	20E	5370
Cooke Creek	20B10	17	19N	20E	4123
Domery Flat	21B44m	15	20N	14E	2200
Fish Lake	21B4	34	24N	14E	3371
Green Lake	21C10	3	12N	13E	6000
Grouse Camp	20B11	29	21N	19E	5385
High Creek	20B12	34	20N	19E	2930
Joe Lake	21B46a	22	23N	12E	4624
Lake Cle Elum	21B14M	15	20N	14E	2200
Lemah Creek	21B47a	7	23N	13E	3327
Manastash	20C1	24	17N	16E	3935
Morse Lake	21C17	6	16N	11E	5400
Nanum	20B13	4	20N	19E	3875
Trail Creek	20B14	20	19N	20E	3360
Tunnel Avenue	21B8	13	21N	11E	2450
Van Epps Pass	20B26a	16	23N	15E	5925
Walters Flat	20B15	22	20N	19E	3360
Waptus Lake	21B49a	12	23N	13E	3024
White Pass (East Side)	21C28	2	13N	11E	4500
White Pass (Leach Lake)	21C27	1	13N	11E	4500

LOWER COLUMBIA DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Asotin Creek					
Spruce Springs	17C4	9	8N	40E	5700
Mill Creek					
Couse	17C3m	2	9N	35E	3370
Homestead	17C1	11	9N	40E	4030
Martin Springs (Helmers SM)	17C2M	23	9N	40E	4400
Klickitat River					
Satus Pass	20D1	21	6N	17E	4030
West Fork Cabin	21C15	23	9N	12E	3000
White Salmon River					
Cultus Creek	21C12	35	7N	8E	4000
Lewis River					
Blue Lake	21C22a	19	9N	8E	4800
Bob's Trail	21C21	25	8N	7E	2200
Calamity Ridge	22D1a	8	5N	5E	2500
Council Pass	21C18a	24	9N	9E	4200
Lewis River (continued)					
Divide Meadow	21C29a	21	9N	10E	5600
Grand Meadow	21C25	28	8N	9E	3500
Lone Pine Shelter	21C26	8	9N	7E	3800
Marble Mountain	22C5a	24	8N	5E	3200
New Muddy River	22C6	36	8N	6E	2000
Oldman Pass	21D19	22	6N	7E	3100
Plains of Abraham	22C1a	35	9N	5E	4400
Smith Creek Road	22C4	29	9N	6E	2100
Spencer Meadow	21C20a	16	8N	7E	3400
Surprise Lakes	21C13A	14	7N	8E	4250
Table Mountain	21C24a	20	9N	9E	4200
Timbered Peak	21D18a	36	6N	6E	3000
Cowlitz River					
Cayuse Pass	21C6	15	16N	10E	5300
Mosquito Meadows	21C19	33	10N	7E	4100
Ohanapecosh	21C32	28	15N	10E	2200
Packwood Lake	21C31	21	13N	10E	2870
Pigtail Peak	21C33	11	13N	11E	5900
Potato Hill	21C14	36	10N	10E	4500
Willame Creek	21C30	3	13N	8E	3250

PUGET SOUND DRAINAGE

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Nisqually River					
Ghost Forest	21C4	23	15N	BE	4550
Longmire	21C3	29	15N	8E	2760
Paradise Park (New)	21C35	13	15N	8E	
Stem Glade	21C1	13	15N	8E	5050
White River					
Corral Pass	21B13	30	18N	11E	6000
White River Campground	21C34	4	16N	9E	
Green River					
Airstrip	21B24	18	20N	11E	1800
Charley Creek	21B25	27	21N	8E	1200
Cougar Mountain	21B42SP	21	21N	9E	3200
Grass Mountain No. 2	21B27	14	20N	8E	2900
Grass Mountain No. 3	21B28	12	20N	8E	2100
Lester Creek	21B29	36	20N	10E	3100
Lynn Lake	21B50	21	20N	8E	4000
Sawmill Ridge	21B31	5	19N	11E	4700
Snowshoe Butte	21B43SP	14	20N	11E	5000
Stampede Pass	21B10	25	21N	11E	3000
Twin Camp	21B30	18	19N	11E	4100
Cedar River					
City Cabin	21B3	10	21N	10E	2390
Mt. Gardner	21B21	30	22N	10E	3300
Mt. Gardner Aux.	21B22	31	22N	10E	2500
Mt. Lindsay	21B16	31	22N	9E	2500
Mt. Washington	21B15	8	22N	9E	3000
Mt. Washington New	21B50	8	22N	9E	3000
Rex River	21B17	11	21N	9E	2400
South Fork Cedar	21B6	24	21N	10E	3000
Tinkham Creek	21B20	1	21N	10E	3400
Snoqualmie River					
Alpine Meadow	21B48	31	27N	9E	3500
Olallie Meadows	21B2	19	22N	11E	3625
South Fork Tolt	21B18	26	26N	9E	1900
Skykomish River					
Lake Elizabeth	21B19	33	26N	10E	2900
Skagit River					
Beaver Creek Trail	21A4	35	39N	12E	2200
Beaver Pass	21A1	9	39N	12E	3680
Brown Top	21A28a	26	40N	12E	6000
Devils Park	20A4	34	38N	16E	5900
Freezeout Creek Trail	20A1	14	40N	14E	3500
Freezeout Meadows	20A2	B	40N	16E	5000
Freezeout Meadows New	20A38	8	40N	16E	5000
Granite Creek	21A29	25	36N	16E	3500
Lake Hozomeen	21A2	19	40N	14E	2600
Meadows Cabins	20A8	29	36N	14E	1900
New Hozomeen Lake	20A7	19	40N	14E	2800
Thunder Basin	21A30	15	35N	14E	4200
Baker River					
Baker Pass	21A27a	1	37N	7E	4900
Dock Butte	21A11A	8	36N	8E	3800
Easy Pass	21A7A	19	39N	11E	5200
Jasper Pass	21A6A	17	38N	11E	5400
Komo Kulshan	21A17	31	37N	9E	800
Marten Lake	21A9A	23	38N	8E	3600
Mount Blum	21A18a	27	38N	10E	5800
Rocky Creek	21A12A	20	37N	8E	2100
Schreibers Meadow	21A10A	18	37N	8E	3400
S. F. Thunder Creek	21A14A	20	36N	9E	2200
Sulphur Creek	21A13	22	37N	8E	1600
Three Mile Creek	21A15	18	36N	9E	1600
Watson Lakes	21A8	25	37N	9E	4500
Nooksack River					
Bald Mountain	21A19a	7	40N	7E	4400
Canyon	21A20A	20	40N	8E	5100
Glacier Creek	21A23	9-10	38N	7E	3700
Panorama New	21A26	17	39N	9E	4300
Panorama Snow Pillow	21A25SP	17	39N	9E	4300
Twin Lakes	21A21a	16	40N	9E	5200

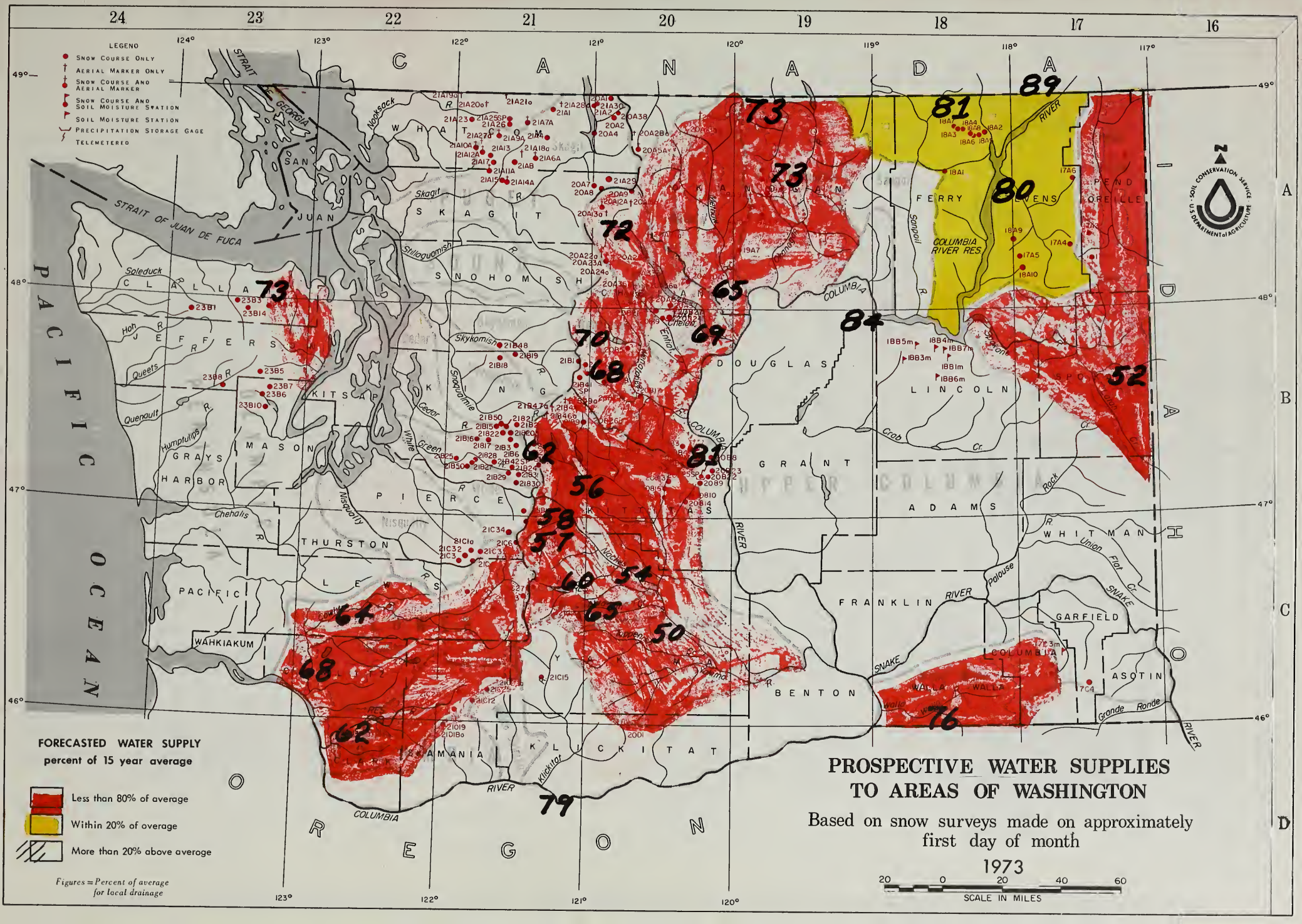
OLYMPIC PENINSULA

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Dungeness River					
Deer Park	2384	1	28N	5W	5200
Morse Creek					
Cox Valley	23814	29	28N	6W	
Elwha River					
Hurricane	2383	36	29N	7W	4500
Skokomish River					
Black and White	2387	17	24N	5W	4200
Black and White Lakes	2386	16	24N	5W	4700
Four Stream	23810	1	23N	6W	3000
Home Sweet Home	23B5	2B	25N	5W	5200
Sundown Pass	2388	25	24N	7W	3900
Soleduck River					
Deer Lake	23B1	14	28N	9W	3900

LEGEND

NUMBERING SYSTEM EXAMPLE

21A7	SNOW COURSE ONLY
21A7a	AERIAL MARKER ONLY
21A7A	SNOW COURSE AND AERIAL MARKER
21A7M	SNOW COURSE AND SOIL MOISTURE STATION
21A7m	SOIL MOISTURE STATION
21A7P	SNOW COURSE AND PRECIPITATION STORAGE GAGE
21A7p	PRECIPITATION STORAGE GAGE
21A7SP	SNOW PILLOW


PROSPECTIVE WATER SUPPLIES TO AREAS OF WASHINGTON
Based on snow surveys made on approximately first day of month
1973
FORECASTED WATER SUPPLY
percent of 15 year average
Less than 80% of average
Within 20% of average
More than 20% above average
Figures = Percent of average for local drainage
LEGEND
Snow Course Only
Aerial Marker Only
Snow Course And Aerial Marker
Snow Course And Soil Moisture Station
Soil Moisture Station
Precipitation Storage Gage
Telemetered
SCALE IN MILES
CANADA
PACIFIC OCEAN
OREGON
STRAIT OF JUAN DE FUCA
COLUMBIA RIVER RES.
SOIL CONSERVATION SERVICE · U.S. DEPARTMENT of AGRICULTURE

INDEX to WASHINGTON SNOW COURSES, SOIL MOISTURE STATIONS and PRECIPITATION STORAGE GAGES

UPPER COLUMBIA DRAINAGE

Pend Oreille River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Boyer Mountain	17A2	7	31N	43E	5250
Bunchgrass Meadow	17A1	24	37N	44E	5000
Winchester Creek	17A3	30	33N	43E	2970

Kettle River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Boulder Road	18A2	36	39N	36E	1450
Butte Creek	18A3	28	39N	35E	4070
Cabin Creek	18AB	5	38N	36E	3170
Goat Creek	18A4	26	39N	35E	3595
Snow Caps Creek	18A5	3	38N	36E	2150
Snow Caps Trail	18A6	5	38N	36E	2720
Summit G. S.	18A7	20	39N	35E	4600

Colville River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Baird	17A6	19	36N	42E	3215
Carlson	18A9	34	32N	38E	2B85
Chewelah	17A4	11	32N	41E	4925
Stranger Mountain	17A5	26	31N	3BE	4990
Togo	18A10	6	29N	38E	3370

Sanpoil River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Sherman Creek Pass	18A1	19	36N	35E	5350

Okanogan River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Clark	19A8a	2	36N	23E	7000
Muckamuck	19A9a	20	36N	24E	6750
Mutton Creek No. 1	19A1	30	37N	24E	5700
Mutton Creek No. 2	19A4	19	37N	24E	6000
Paysayten	20A28a	32	40N	18E	4300
Rusty Creek	19A3P	18	35N	24E	4000
Salmon Meadows	19A2PM	33	37N	24E	4500
Starvation Mtn.	19A10a	15	35N	23E	6750
Touts Coulee	19A6	30	39N	25E	2B45

Methow River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Billy Goat Pass	20A10a	10	38N	20E	6400
Dollar Watch	20A29a	8	39N	20E	7000
Harts Pass	20A5A	7	37N	18E	6500
Horseshoe Basin	19A5a	15	40N	23E	7000
Loup Loup	19A7	36	34N	23E	4650

Chelan Lake Basin

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Cloudy Pass	20A22a	12	31N	15E	6500
Greenwood Flat	20A25a	3	31N	16E	3540
Little Meadows	20A24a	8	31N	16E	5275
Lyman Lake	20A23a	1B	31N	16E	5900
Park Creek Flat	20A13a	18	34N	16E	2220
Park Creek Ridge	20A12A	7	34N	16E	4600
Petersons	20A16a	3	34N	17E	3730
Rainy Pass	20A9	21	35N	17E	47B0
Safety Harbor	20A30A	32	31N	20E	6300
War Creek Pass	20A31a	34	33N	1BE	6500

Entiat River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Brief	20B19	34	28N	19E	1600
Entiat Meadows	20A33a	28	31N	17E	4B00
Entiat River Trail	20A34a	2	29N	17E	3150
Four Mile Ridge	20B27a	15	2BN	19E	7000
Fox Camp	20A36a	17	30N	1BE	6510
Pope Ridge	20B20	22	29N	1BE	4300
Pope Ridge Snow Pillow	20B24SP	22	29N	18E	4300
Pugh Ridge	20A32a	34	30N	1BE	6400
Shady Pass	20A37	20	29N	19E	6200
Snow Brushy	20A35a	21	30N	17E	3850
Tommy Creek	20B21a	10	2BN	1BE	5300

Wenatchee River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Berne-Mill Creek	21B23	7	26N	15E	2925
Berne-Mill Creek (New)	21B41SP	13	26N	14E	3240
Blewett Pass No. 2	20B2	35	22N	17E	4270
Chiwaukum G. S.	20B16	4	25N	17E	1B10
Lake Wenatchee	20B5	33	27N	17E	1970
Leavenworth R. S.	20B17	1	24N	17E	1127
Merritt	20B1B	4	26N	16E	2140
Stevens Pass	21B1	14	26N	13E	4070
Stevens Pass Sand Shed	21B45	12	26N	19E	3700
Trough #2	20B25SP	10	20N	20E	5310

Colockum Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Colockum Creek Upper	20B22	11	20N	20E	5300
Colockum Creek Lower	20B23	1	20N	20E	4300

Squilchuck Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Beehive Springs	20B3	12	21N	19E	4400
Scout-A-Vista	20B4	18	21N	20E	3400

Stemilt Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Jump-Off	20B8	34	21N	20E	4450
Stemilt Slide	20B6	30	21N	20E	5000
Upper Wheeler	20B7PM	30	21N	20E	4400

Crab Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Creston-Kunz	18B1m	32	27N	34E	2440
Jack Woods	1BB3m	2B	27N	31E	2750
Krause	1BB4m	21	27N	33E	2420
Sheffels	1BB5m	17	27N	32E	237B
Sherman	1BB7m	24	27N	33E	2440
Wheatridge	1BB6m	24	25N	32E	2290

Yakima River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Ahtanum R. S.	21C11	26	12N	14E	3100
Big Boulder Creek	21B9	35	23N	14E	3200
Bumping Lake	21CB	23	16N	12E	3450
Bumping Lake New	21C36	13	16N	12E	3400
Colockum Pass	20B9	25	20N	20E	5370
Cooke Creek	20B10	17	19N	20E	4123
Domery Flat	21B44m	15	20N	14E	2200
Fish Lake	21B4	34	24N	14E	3371
Green Lake	21C10	3	12N	13E	6000
Grouse Camp	20B11	29	21N	19E	5385
High Creek	20B12	34	20N	19E	2930
Joe Lake	21B46a	22	23N	12E	4624
Lake Cle Elum	21B14M	15	20N	14E	2200
Lemah Creek	21B47a	7	23N	13E	3327
Manastash	20C1	24	17N	16E	3935
Morse Lake	21C17	6	16N	11E	5400
Nanum	20B13	4	20N	19E	3B75
Trail Creek	20B14	20	19N	20E	3360
Tunnel Avenue	21B8	13	21N	11E	2450
Van Epps Pass	20B26a	16	23N	15E	5925
Walters Flat	20B15	22	20N	19E	3360
Waptus Lake	21B49a	12	23N	13E	3024
White Pass (East Side)	21C28	2	13N	11E	4500
White Pass (Leach Lake)	21C27	1	13N	11E	4500

LOWER COLUMBIA DRAINAGE

Asotin Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Spruce Springs	17C4	9	BN	40E	5700

Mill Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Couse	17C3m	2	9N	35E	3370
Homestead	17C1	11	9N	40E	4030
Martin Springs (Helmers SM)	17C2M	23	9N	40E	4400

Klickitat River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Satus Pass	20D1	21	6N	17E	4030
West Fork Cabin	21C15	23	9N	12E	3000

White Salmon River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Cultus Creek	21C12	35	7N	8E	4000

Lewis River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Blue Lake	21C22a	19	9N	BE	4B00
Bob's Trail	21C21	25	BN	7E	2200
Calamity Ridge	22D1a	B	5N	5E	2500
Council Pass	21C1Ba	24	9N	9E	4200

Lewis River (continued)

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Divide Meadow	21C29a	21	9N	10E	5600
Grand Meadow	21C25	28	BN	9E	3500
Lone Pine Shelter	21C26	B	9N	7E	3B00
Marble Mountain	22C5a	24	BN	5E	3200
New Muddy River	22C6	36	BN	6E	2000
Oldman Pass	21D19	22	6N	7E	3100
Plains of Abraham	22C1a	35	9N	5E	4400
Smith Creek Road	22C4	29	9N	6E	2100
Spencer Meadow	21C20a	16	BN	7E	3400
Surprise Lakes	21C13A	14	7N	BE	4250
Table Mountain	21C24a	20	9N	9E	4200
Timbered Peak	21D1Ba	36	6N	6E	3000

Cowlitz River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Cayuse Pass	21C6	15	16N	10E	5300
Mosquito Meadows	21C19	33	10N	7E	4100
Ohanapecosh	21C32	2B	15N	10E	2200
Packwood Lake	21C31	21	13N	10E	2870
Pigtail Peak	21C33	11	13N	11E	5900
Potato Hill	21C14	36	10N	10E	4500
Willame Creek	21C30	3	13N	8E	3250

PUGET SOUND DRAINAGE

Nisqually River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Ghost Forest	21C4	23	15N	BE	4550
Longmire	21C3	29	15N	BE	2760
Paradise Park (New)	21C35	13	15N	8E	
Stem Glade	21C1	13	15N	BE	5050

White River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Corral Pass	21B13	30	1BN	11E	6000
White River Campground	21C34	4	16N	9E	

Green River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Airstrip	21B24	1B	20N	11E	1800
Charley Creek	21B25	27	21N	BE	1200
Cougar Mountain	21B42SP	21	21N	9E	3200
Grass Mountain No. 2	21B27	14	20N	8E	2900
Grass Mountain No. 3	21B2B	12	20N	BE	2100
Lester Creek	21B29	36	20N	10E	3100
Lynn Lake	21B50	21	20N	BE	4000
Sawmill Ridge	21B31	5	19N	11E	4700
Snowshoe Butte	21B43SP	14	20N	11E	5000
Stampede Pass	21B10	25	21N	11E	3000
Twin Camp	21B30	18	19N	11E	4100

Cedar River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
City Cabin	21B3	10	21N	10E	2390
Mt. Gardner	21B21	30	22N	10E	3300
Mt. Gardner Aux.	21B22	31	22N	10E	2500
Mt. Lindsay	21B16	31	22N	9E	2500
Mt. Washington	21B15	B	22N	9E	3000
Mt. Washington New	21B50	8	22N	9E	3000
Rex River	21B17	11	21N	9E	2400
South Fork Cedar	21B6	24	21N	10E	3000
Tinkham Creek	21B20	1	21N	10E	3400

Snoqualmie River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Alpine Meadow	21B4B	31	27N	9E	3500
Olallie Meadows	21B2	19	22N	11E	3625
South Fork Tolt	21B1B	26	26N	9E	1900

Skykamish River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Lake Elizabeth	21B19	33	26N	10E	2900

Skagit River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Beaver Creek Trail	21A4	35	39N	12E	2200
Beaver Pass	21A1	9	39N	12E	3680
Brown Top	21A2Ba	26	40N	12E	6000
Devils Park	20A4	34	3BN	16E	5900
Freezeout Creek Trail	20A1	14	40N	14E	3500
Freezeout Meadows	20A2	B	40N	16E	5000
Freezeout Meadows New	20A38	B	40N	16E	5000
Granite Creek	21A29	25	36N	16E	3500
Lake Hozomeen	21A2	19	40N	14E	2600
Meadows Cabins	20AB	29	36N	14E	1900
New Hozomeen Lake	20A7	19	40N	14E	2B00
Thunder Basin	21A30	15	35N	14E	4200

Baker River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Baker Pass	21A27a	1	37N	7E	4900
Dock Butte	21A11A	B	36N	BE	3B00
Easy Pass	21A7A	19	39N	11E	5200
Jasper Pass	21A6A	17	3BN	11E	5400
Komo Kulshan	21A17	31	37N	9E	B00
Marten Lake	21A9A	23	3BN	BE	3600
Mount Blum	21A1Ba	27	3BN	10E	5B00
Rocky Creek	21A12A	20	37N	8E	2100
Schreibers Meadow	21A10A	1B	37N	BE	3400
S. F. Thunder Creek	21A14A	20	36N	9E	2200
Sulphur Creek	21A13	22	37N	BE	1600
Three Mile Creek	21A15	1B	36N	9E	1600
Watson Lakes	21AB	25	37N	9E	4500

Nooksack River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Bald Mountain	21A19a	7	40N	7E	4400
Canyon	21A20A	20	40N	BE	5100
Glacier Creek	21A23	9-10	38N	7E	3700
Panorama New	21A26	17	39N	9E	4300
Panorama Snow Pillow	21A25SP	17	39N	9E	4300
Twin Lakes	21A21a	16	40N	9E	5200

OLYMPIC PENINSULA

Dungeness River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Deer Park	23B4	1	2BN	5W	5200

Morse Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Cox Valley	23B14	29	2BN	6W	

Elwha River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Hurricane	23B3	36	29N	7W	4500

Skokamish River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Black and White	23B7	17	24N	5W	4200
Black and White Lakes	23B6	16	24N	5W	4700
Four Stream	23B10	1	23N	6W	3000
Home Sweet Home	23B5	2B	25N	5W	5200
Sundown Pass	23BB	25	24N	7W	3900

Soleduck River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
Deer Lake	23B1	14	28N	9W	3900

LEGEND

NUMBERING SYSTEM EXAMPLE

21A7	SNOW COURSE ONLY
21A7a	AERIAL MARKER ONLY
21A7A	SNOW COURSE AND AERIAL MARKER
21A7M	SNOW COURSE AND SOIL MOISTURE STATION
21A7m	SOIL MOISTURE STATION
21A7P	SNOW COURSE AND PRECIPITATION STORAGE GAGE
21A7p	PRECIPITATION STORAGE GAGE
21A7SP	SNOW PILLOW

WATER SUPPLY OUTLOOK

State of Washington
April 1, 1973

* *
* The water supply situation in the northern Columbia Basin in *
* Canada has improved from that which was reported last month. This *
* improvement has extended to the west through the Kettle drainage *
* and ran out in the Okanogan-Similkameen. The situation in these *
* two watersheds is the same as last month. The rest of the water- *
* sheds in Washington and tributary basins all have a worsening *
* water supply outlook. Comparing snow cover as of April 1 with *
* March 1, the general trend is for a lower percentage than re- *
* ported last month, with some exceptions. These exceptions are *
* minor. The snow pack, as of April 1, ranges from a high of 84% *
* of normal for the Sanpoil River, measured by one snow course, to *
* a low of 25% of normal for the Cedar, measured by five snow *
* courses. Precipitation, as reported by the Weather Bureau, ranges *
* from 34% of normal in central Washington to a high of 103% of *
* normal for the Columbia in Canada. Runoff during the month gen- *
* erally ranged below normal, with only the flow at Birchbank *
* having above normal runoff. Of the indicator stations used for *
* comparison, the Palouse at Hooper had the lowest runoff at 41%. *
* The result of this situation is a general decrease in water *
* supply forecasts for all streams except the mainstream of the *
* Columbia. *
* *

SNOW COVER

The snow pack continues to be the lowest in the state of Washington since the dry year of 1963. The situation was more critical in that year, but things could deteriorate further with subnormal rainfall this spring, as well as above normal temperatures. The snow cover in the northeast ranges from 84% of normal for the Sanpoil River to 50% for the Spokane. The Sanpoil drainage is measured by only one snow course and this measurement might not be indicative of the overall area. In the Okanogan-Methow area, the snow pack is now 78% of average and 52% of last year. The Chelan-Wenatchee area has a snow pack that ranges from 49 to 72% of average and 30 to 45% of last year. In the Yakima drainage, the snow cover measured by 19 snow courses is only 52% of average and 36% of last year. The Lower Columbia has even less snow than Yakima, ranging from 41 to 51% of average. The real dry watershed in the state is the Cedar River. This drainage has five snow courses with measurable amounts of snow and these courses were only 25% of average and 17% of what occurred last year at this time. The Puget Sound drainage ranges from this low of 25% to a high of 69% for the White River. On the Olympic Peninsula, the snow cover ranges from 46% of normal in the Elwha drainage to 74% for the Skokomish.

RESERVOIRS

The power reservoirs in the Columbia drainage of Washington have considerably less than normal amounts of water in storage as of April 1. The irrigation reservoirs all have considerably more. The only reservoir not following this trend is the Ross Reservoir on the Skagit River. With careful management and normal to above precipitation, irrigation reservoirs will have adequate water. Power reservoirs will have to be managed very carefully to insure adequate power. This situation is now taking place with the cutting of interruptable power by Bonneville Power Administration.

PRECIPITATION

As reported by the National Weather Service, rainfall in March ranged from 34% of normal for the central Washington drainage division to 3% above normal for the Columbia in Canada. The November through March winter period for precipitation ranges from 70% of normal for the central Washington area to 81% for the Southeastern drainage division.

STREAMFLOW

The streams, except the Columbia at Birchbank, reported below normal streamflow during March. Forecasts of water supply outlook can be found in the following tabulation and range from a low of 50% of normal for the Yakima River at Parker to a high of 89% of normal for the Columbia at Birchbank. This is an increase of 4% for Birchbank and a decrease of 8% for the Yakima.

STREAMFLOW FORECASTS - APRIL 1973

The following summarized runoff forecasts are based principally on mountain snow cover and on the assumption that precipitation and temperature will be near average from the present time to the end of the forecast period. Appreciable deviations from normal of temperature and/or precipitation will correspondingly modify these forecasts. Streamflow figures for 1972 are preliminary and subject to revision.

Basin, Stream and Station	Forecast Runoff 1973	% 15-Yr. Avg.	Seasonal Streamflow in Thousands of Acre-Ft. Forecast Period	1972	1971	1970	15-Yr. Average 1953-67
COLUMBIA BASIN							
Columbia River System							
Columbia River	41360	89	Apr-Sep	52590	48592	34490	46368
at Birchbank 1/	32300	86	Apr-Jul	42700	39462	27840	37480
	22600	84	Apr-Jun	31000	29759	20890	27040
Columbia River	58500	84	Apr-Sep	83880	75360	54617	69458
at Grand Coulee 1/	49200	84	Apr-Jul	71820	64444	46563	58899
	36500	80	Apr-Jun	56200	51550	37574	45889
Columbia River bl.	61900	81	Apr-Sep	98040	84965	58544	76241
Rock Island Dam 1/	50600	78	Apr-Jul	84520	73096	50236	64777
	38500	76	Apr-Jun	66100	58235	40675	50387
Columbia River at	82800	79	Apr-Sep	134620	123427	88146	105176
The Dalles, OR 1/	68600	76	Apr-Jul	117810	107702	76054	90050
	54100	75	Apr-Jun	96290	88936	62847	72410
Pend Oreille River System							
Pend Oreille River	10900	68	Apr-Sep			14737	16030
bl. Box Canyon	9950	67	Apr-Jul			13676	14788
	8290	65	Apr-Jun			11985	12754
Kettle River System							
Kettle River	1550	81	Apr-Sep		2240	1099	1918
nr. Laurier	1550	82	Apr-Jul		2177	1068	1821
	1320	80	Apr-Jun		1927	1004	1644
Colville River							
at Kettle Falls	122	80	Apr-Sep		170	94	153
	113	80	Apr-Jul		158	86	141
	105	80	Apr-Jun		146	80	131

1/ Observed flow corrected for storage in any of the following reservoirs which are above the station: Kootenay Lake, Hungry Horse, Flathead Lake, Pend Oreille Lake, F. D. Roosevelt Lake, Lake Chelan, Coeur d'Alene Lake, Brownlee, Noxon Reservoir and pumpage at F. D. Roosevelt Lake.

Streamflow Forecasts - April 1973 (Cont.)

Basin, Stream and Station	Forecast Runoff 1973	% 15-Yr. Avg.	Seasonal Streamflow in Thousands of Acre-Ft. Forecast Period	1972	1971	1970	15-Yr. Average 1953-67
Spokane River System*							
Spokane River at	1650	52	Apr-Sep	3971		2514	3151
Post Falls ID 2/	1580	52	Apr-Jul			2418	3055
	1520	52	Apr-Jun			2274	2913
Okanogan River System							
Similkameen River	1110	73	Apr-Sep	3162	1931	850	1525
nr. Nighthawk	1035	73	Apr-Jul	2998	1840	808	1419
	877	73	Apr-Jun	2505	1576	739	1197
Okanogan River	1270	73	Apr-Sep	3824	2225	923	1738
nr. Tonasket	1100	70	Apr-Jul	3481	2077	864	1578
	925	70	Apr-Jun	2846	1772	785	1318
Methow River System							
Methow River	680	65	Apr-Sep	--	1339	622	1054
nr. Pateros	660	67	Apr-Jul	--	1259	587	981
	565	68	Apr-Jun	--	1061	532	834
Chelan River System							
Chelan River	875	69	Apr-Sep	1965	1550	905	1266
at Chelan 3/	780	70	Apr-Jul	1717	1352	816	1119
	625	72	Apr-Jun	1309	1019	683	870
Stehekin River	650	72	Apr-Sep	--	1093	678	904
at Stehekin	570	74	Apr-Jul	--	927	589	772
	430	73	Apr-Jun	--	657	478	586
Entiat River	170	--	Apr-Sep		310	160	--
nr. Ardenvoir	155	--	Apr-Jul		280	148	--
	130	--	Apr-Jun		209	129	--
Wenatchee River System							
Wenatchee River	930	70	Apr-Sep	--	1637	1019	1333
at Plain	875	73	Apr-Jul	--	1448	941	1204
	700	74	Apr-Jun	--	1045	804	952
Wenatchee River	1230	68	Apr-Sep	2808	2241	1416	1814
at Peshastin	1160	70	Apr-Jul	2481	1999	1318	1651
	1000	76	Apr-Jun	1891	1454	1132	1316
Stemilt Basin nr. Wenatchee	110*	84	May-Sep	145*	148*	123*	131*

* Forecasts made of Jack A. Wilson, Soil Conservation Service, Boise, Idaho.

2/ Observed flow corrected for storage in Coeur d'Alene Lake and diversions by Spokane Valley Farms Company and Rathdrum Prairie Canals.

3/ Observed flow corrected for storage in Lake Chelan.

** Thousands of Miners' inches.

Streamflow Forecasts - April 1973 (Cont.)

Basin, Stream and Station	Forecast Runoff 1973	% 15-Yr. Avg.	Seasonal Streamflow in Thousands of Acre-Ft. Forecast Period	1972	1971	1970	1953-67
Yakima River System							
Yakima River	90	62	Apr-Sep	213	192	131	145
nr. Martin 4/	80	60	Apr-Jul	192	179	123	134
	75	65	Apr-Jun	160	139	114	116
Yakima River							
at Cle Elum 5/	540	56	Apr-Sep		1300	866	968
	500	56	Apr-Jul		1179	803	885
	450	59	Apr-Jun		934	723	762
Yakima River							
nr. Parker 6/	870	50	Apr-Sep		2873	1491	1738
	900	52	Apr-Jul		2620	1512	1722
	825	52	Apr-Jun		2153	1461	1583
Kachess River	66	52	Apr-Sep	196	172	115	128
nr. Easton 7/	62	51	Apr-Jul	182	163	112	122
	60	56	Apr-Jun	153	130	104	107
Cle Elum River	285	59	Apr-Sep	750	627	435	485
nr. Roslyn 8/	265	60	Apr-Jul	673	568	402	445
	230	62	Apr-Jun	538	433	350	373
Bumping River	85	57	Apr-Sep	234	193	129	150
nr. Nile 9/	78	56	Apr-Jul	209	174	122	138
	70	61	Apr-Jun	156	124	107	114
American River	75	58	Apr-Sep		172	128	129
nr. Nile	70	58	Apr-Jul		154	120	120
	63	64	Apr-Jun		113	106	99
Tieton River	150	60	Apr-Sep	396	326	244	251
at Tieton Dam 10/	125	58	Apr-Jul	338	272	207	215
	102	59	Apr-Jun	261	198	172	172
Naches River	485	54	Apr-Sep		1140	841	899
nr. Naches 11/	440	54	Apr-Jul		1039	779	819
	390	56	Apr-Jun		823	694	698

4/ Observed flow corrected for storage in Lake Keechelus.
5/ Observed flow corrected for storage in Keechelus, Kachess and Cle Elum Lakes and diversion by Kittitas Canal.
6/ Observed flow corrected for storage in Keechelus, Kachess, Cle Elum, Bumping and Rimrock Lakes and diversions by Roza, Union Gap, New Reservation, Old Reservation and Sunnyside Canals.
7/ Observed flow corrected for storage in Lake Kachess.
8/ Observed flow corrected for storage in Lake Cle Elum.
9/ Observed flow corrected for storage in Bumping Lake.
10/ Observed flow corrected for storage in Rimrock Lake.
11/ Observed flow corrected for storage in Bumping and Rimrock Lakes and diversions by Tieton, Selah Valley, Wapatox Canals and City of Yakima.

Streamflow Forecasts - April 1973 (Cont.)

Basin, Stream and Station	Forecast Runoff 1973	% 15-Yr. Avg.	Seasonal Streamflow in Thousands of Acre-Ft. Forecast Period	1972	1971	1970	15-Yr. Average 1953-67
Yakima River System (Cont.)							
Ahtanum Creeks	32	65	Apr-Sep		63	43	49
nr. Tampico 12/	29	64	Apr-Jul		57	39	45
	26	65	Apr-Jun		48	35	40
Lower Columbia River System							
Mill Creek	22	76	Apr-Sep		30	27	29
nr. Walla Walla	19	76	Apr-Jul		26	23	25
	16	70	Apr-Jun		24	21	23
Lewis River							
at Ariel 13/	850	62	Apr-Sep		1827	914	1358
	710	59	Apr-Jul		1605	798	1197
	640	60	Apr-Jun		1341	723	1059
Cowlitz River blw.	1380	64	Apr-Sep		2800	1615	2160
Mayfield Dam	1180	62	Apr-Jul		2463	1425	1908
	1015	63	Apr-Jun		1935	1245	1612
Cowlitz River							
at Castle Rock 14/	1920	68	Apr-Sep		3710	2134	2818
	1660	67	Apr-Jul		3253	1873	2487
	1450	68	Apr-Jun		2585	1652	2119
OLYMPIC PENINSULA							
Dungeness River System							
Dungeness River	125	73	Apr-Sep		196	136	172
nr. Sequim	105	74	Apr-Jul		154	115	141
	79	75	Apr-Jun		105	89	105

12/ Observed flow of North and South Forks (combined).
13/ Observed flow corrected for storage in Lake Merwin, Yale and Swift Reservoirs.
14/ Observed flow corrected for storage in Mayfield Reservoir

COMPARISON OF SNOW COVER WITH THAT OF PREVIOUS YEARS

The following tabulation of Washington stream basins presents the water content of the snow about April 1, 1973, as percent of the same date in 1972 and 1971 and average of record.

Tributary Basin	No. of Courses Average	1973 Snow Water Expressed as percent of 1972	1971	1953-67
		UPPER COLUMBIA BASIN		
Pend Oreille	15	64	56	67
Kettle	12	56	61	71
Colville	4	109	44	60
Spokane	15	36	39	50
Sanpoil	1	101	82	84
Okanogan	38	54	61	78
Methow	9	52	56	79
Chelan	5	45	51	72
Entiat	9	43	46	57
Wenatchee	9	30	32	49
Yakima	19	36	33	52
Ahtanum	2	42	--	69
		LOWER COLUMBIA		
Mill Creek	3	34	35	41
White Salmon	2	32	28	46
Lewis	14	34	27	44
Cowlitz	8	36	34	51
		PUGET SOUND		
Nisqually	3	35	41	58
White	3	51	46	69
Green	8	35	32	47
Cedar	5	17	17	25
Snoqualmie	3	31	27	40
Skykomish	5	36	39	58
Skagit	16	38	38	53
Baker	8	47	44	58
Nooksack	5	49	62	--
		OLYMPIC PENINSULA		
Skokomish	4	62	45	74
Elwha	1	55	41	56
Dungeness	1	60	48	64

RESERVOIR STORAGE - 1000 Feet

BASIN or STREAM	RESERVOIR	USABLE 1/ CAPACITY	Measured (April) 1973	1972	1971	Normal*
		COLUMBIA				
Spokane	Coeur d'Alene Lake	225.1	83.9	335.2	137.9	164.0
Columbia	Franklin D. Roosevelt Lake	5232.0	1546.3	1242.4	1534.2	2359.6
Columbia	Banks Lake	761.8	592.0	680.2	674.8	499.3
Okanogan	Conconully Reservoir	13.0	11.8	10.8	6.1	6.7
Okanogan	Salmon Lake	10.5	9.5	8.6	2.1	8.5
Chelan	Lake Chelan	676.1	121.4	199.5	179.9	169.0
		YAKIMA				
Yakima	Keechelus Lake	157.8	112.1	127.5	122.4	102.8
Kaches	Kachess Lake	239.0	196.8	215.3	190.7	184.4
Cle Elum	Lake Cle Elum	436.9	340.5	326.9	251.8	278.8
Bumping	Bumping Lake	33.7	11.7	9.1	3.3	14.0
Tieton	Rimrock Lake	198.0	160.8	145.1	139.6	135.8
		PUGET SOUND				
Skagit	Ross Reservoir	1202.0	734.2	833.0	757.2	715.2
Skagit	Diablo Reservoir	90.6	87.5	87.8	84.3	85.5
Skagit	Gorge Reservoir	9.8	8.4	7.8	8.3	-

1/ Based on Active Storage
* 15-year average 1953-67

SOIL MOISTURE - APRIL

Drainage Basin and Station	Number	Elev.	Profile Depth	(Inches) Total Capacity	Soil Moisture Content (Inches as of Apr. 1) 1973	1972	1971
CRAB CREEK							
Jack Woods	18B3m	2750	48	13.6	9.7	9.6	10.1
Krause	18B4m	2420	48	13.6	8.8	9.2	9.3
Sheffels	18B5m	2380	48	13.6	9.8	9.7	9.1
Sherman	18B7m	2440	48	13.6	7.9	9.0	8.9
Wheatridge	18B6m	2290	48	13.6	8.5	10.4	10.4
OKANOGAN							
Salmon Meadows	19A2M	4500	48	5.4	3.0	3.7	3.6
Trout Creek	3-M	3600	48	7.3	3.7	5.6	3.8
YAKIMA							
Domery Flat	21B20m	2200	48	6.9	6.1	--	4.9
Lake Cle Elum	21B14M	2200	48	12.8	9.2	--	9.2
WALLA WALLA							
Couse	17C3m	3650	48	11.1	9.4	10.5	10.6
Helmers	17C2M	4400	48	12.0	8.3	10.6	11.0
WENATCHEE							
Upper Wheeler	20B7M	4400	48	12.7	11.4	12.4	10.2

FALL SOIL MOISTURE

Drainage Basin and Station	Number	Elev.	Profile Depth	(Inches) Total Capacity	Soil Moisture Content (Inches) as of Oct. 1 1972	1971	1970
CRAB CREEK							
Jack Woods	18B3m	2750	48	13.6	5.6	5.3	7.0
Krause	18B4m	2420	48	13.6	6.2	5.0	4.4
Sheffels	18B5m	2380	48	13.6	6.5	5.3	4.4
Sherman	18B7m	2440	48	13.6	4.6	4.0	3.8
Wheatridge	18B6m	2290	48	13.6	6.2	5.5	7.8
OKANOGAN							
Salmon Meadows	19A02M	4500	48	5.4	2.8	2.7	1.7
Trout Creek	3-M	3600	48	7.3	3.3	3.3	3.4*
YAKIMA							
Domery Flat	21B20m	2200	48	6.9	4.1	2.1	2.4
Lake Cle Elum	21B14M	2200	48	12.8	8.7	7.1	7.6
WALLA WALLA							
Couse	17C3m	3650	48	11.1	6.0	6.2	5.9
Helmers	17C2M	4400	48	12.0	7.7	8.2	7.3
WENATCHEE							
Upper Wheeler	20B7M	4400	48	12.7	5.7	6.5	5.1

* November 1 measurement

PRECIPITATION 1/

Division Averages and Departures

Drainage Divisions	FALL Sept-Oct Observed	FALL 1972 2/ Departure	WINTER Nov - 1972 Observed	WINTER Mar - 1973 2/ Departure
Columbia in Canada	4.15	+ 0.26	9.74	- 2.95
Pend Oreille - Spokane	2.68	- 1.20	13.23	- 5.02
Northeastern Washington	2.16	- 0.09	8.58	- 2.51
Southeastern Washington	2.35	- 0.30	10.01	- 2.40
Central Washington	3.48	- 0.96	18.98	- 8.15
North Central Washington	1.04	- 0.37	4.70	- 1.64
Northwest Slope Cascades	10.41	- 1.26	39.43	-12.71
Southwest Slope Cascades	6.56	- 1.16	29.75	-11.12

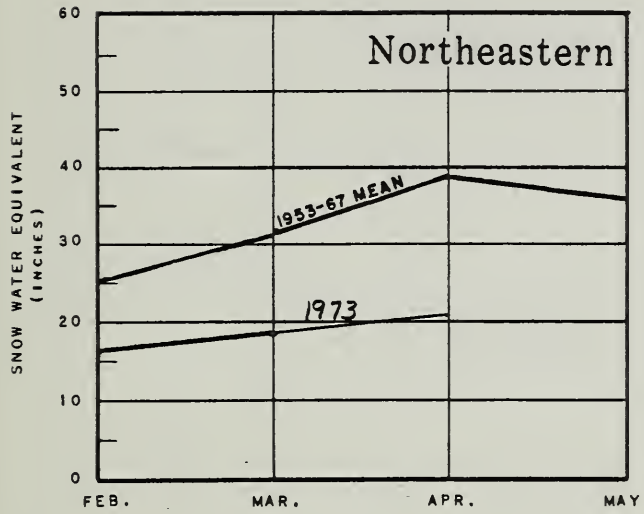
Northeastern Washington	- Lower Spokane, Colville, Sanpoil and lower Kettle drainages.
Southeastern Washington	- Touchet, Tucannon and Palouse drainages.
Central Washington	- Yakima, Wenatchee and Chelan drainages.
North Central Washington	- Methow and Okanogan drainages.
Northwest Slope Cascades	- Puget Sound drainages.
Southwest Slope Cascades	- Lower Columbia drainages.

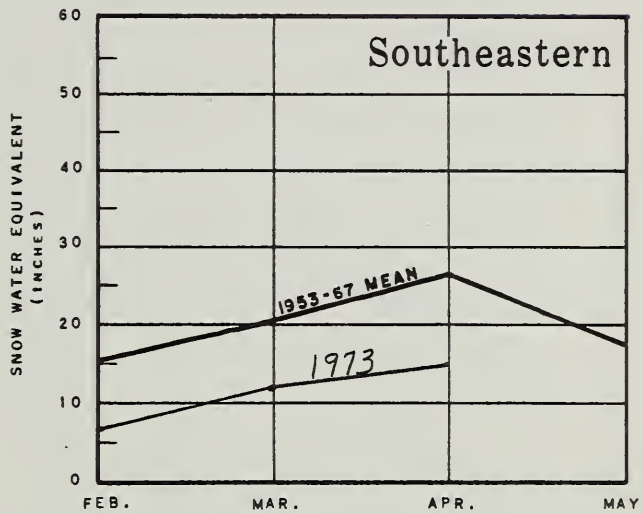
1/ - Preliminary analysis by National Weather Service from data furnished by Meteorological Services of Canada and National Weather Service.

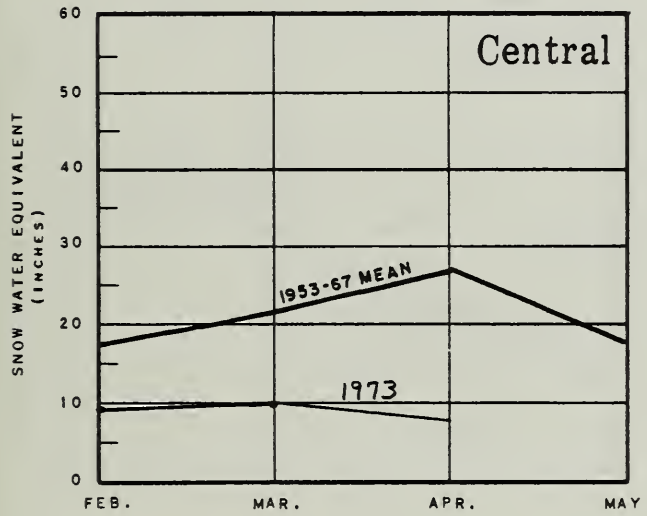
2/ - Departure from 15-year (1953-67) drainage division average.

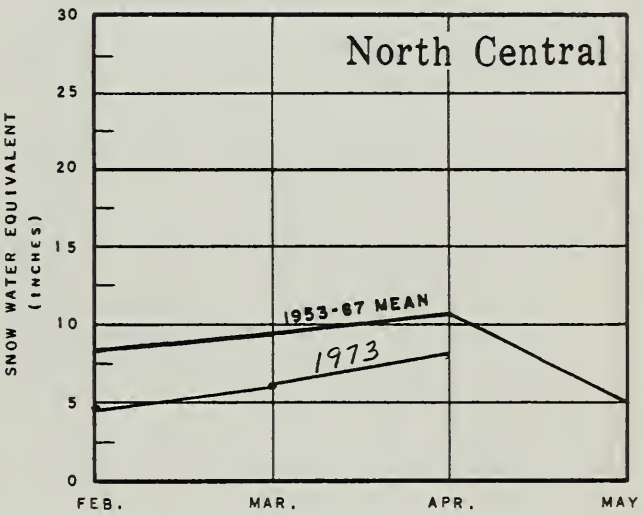
WASHINGTON SNOW COVER

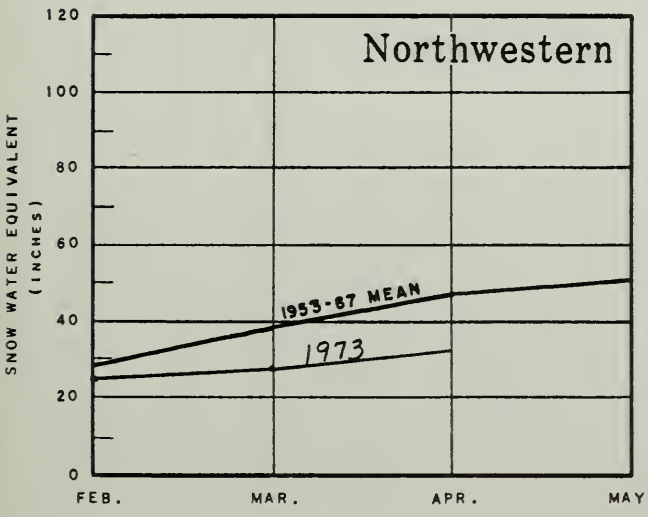
DRAINAGE AREAS

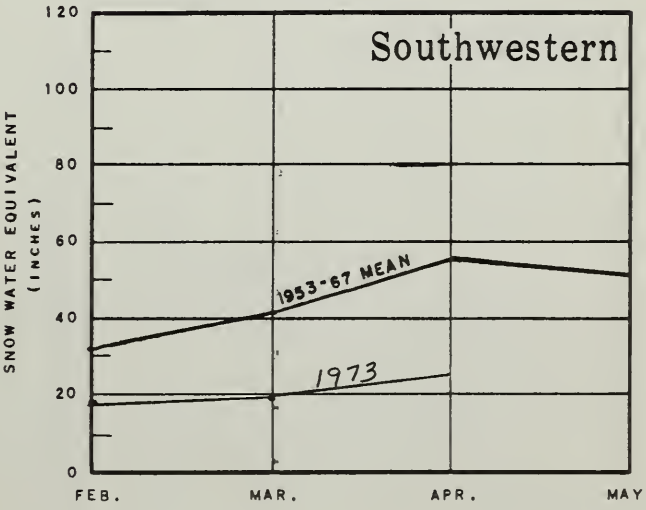










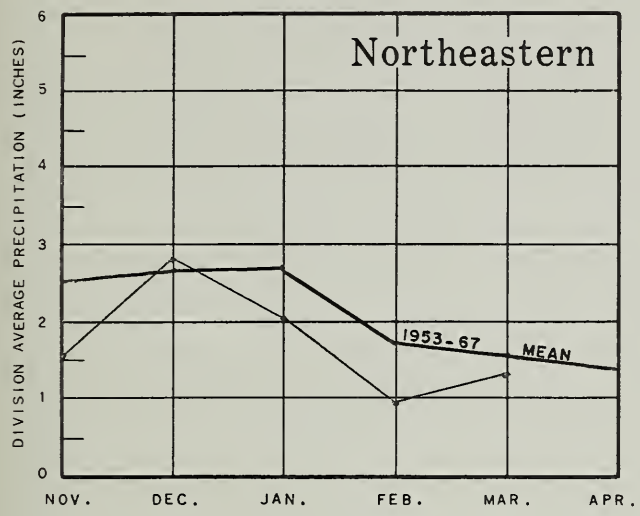


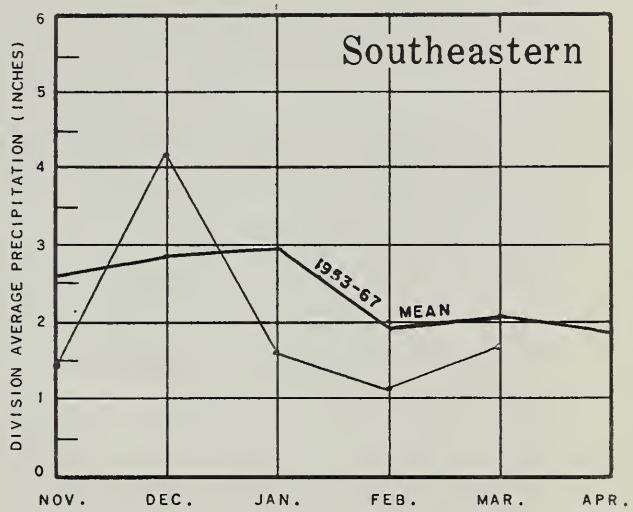
Selected Snow Survey Courses by Soil Conservation Service

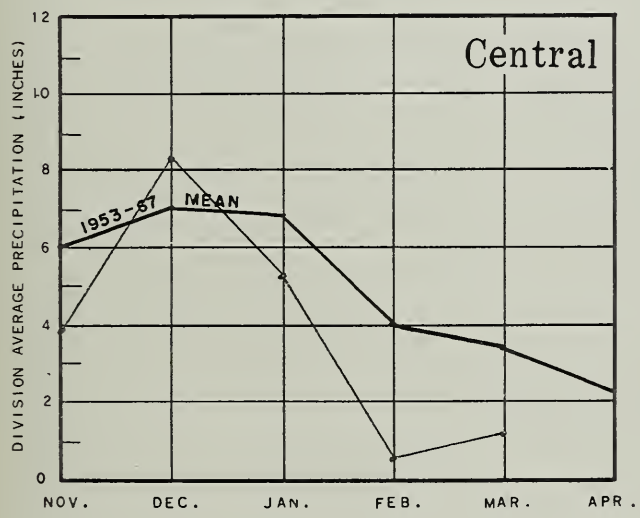
WASHINGTON VALLEY PRECIPITATION

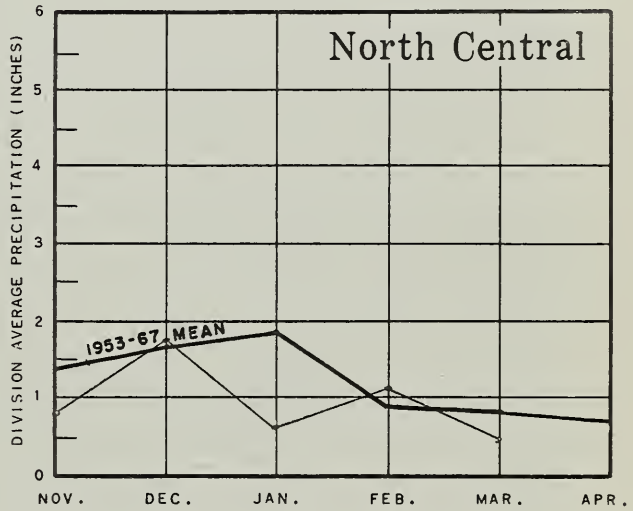
1972 - 1973

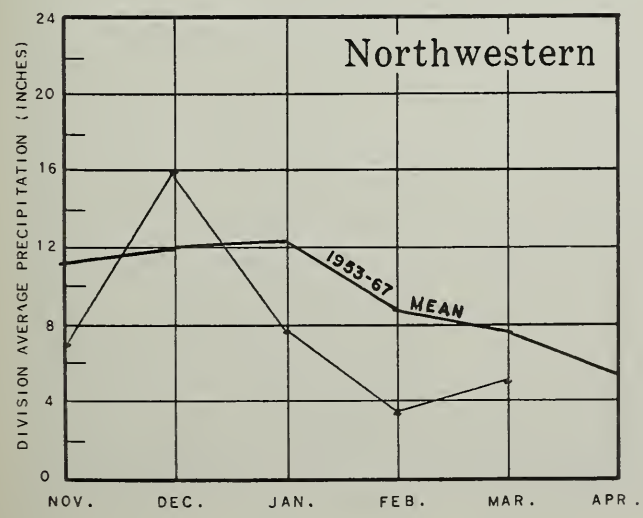
DRAINAGE AREAS

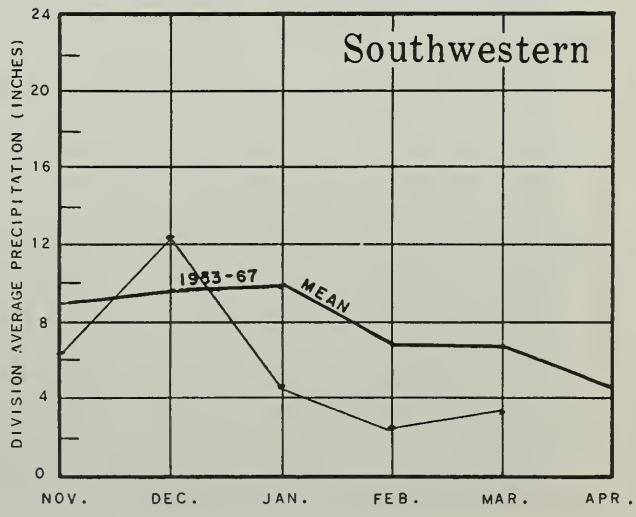












Preliminary Analysis by National Weather Service

M7-0-22028-2-L USDA-SCS-PORTLAND, OREG. 1971

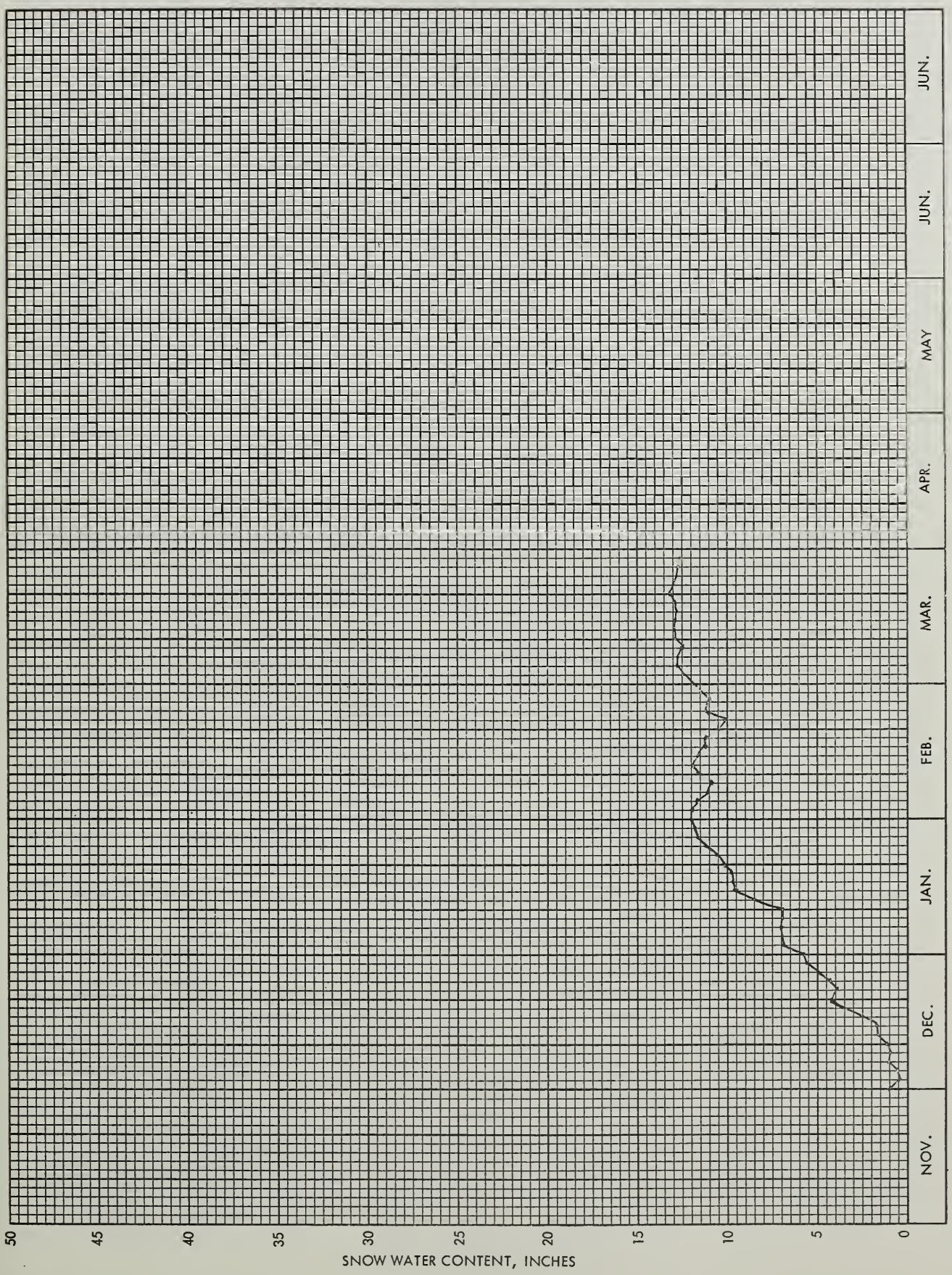
SNOW PILLOW DATA

1972 - 1973

Berne-Mill Creek

Sec. 13 T. 26N R. 14E No. 21B41SP Drainage: Wenatchee

Lat. 47 45' Long. 121 42' Elev. 3240



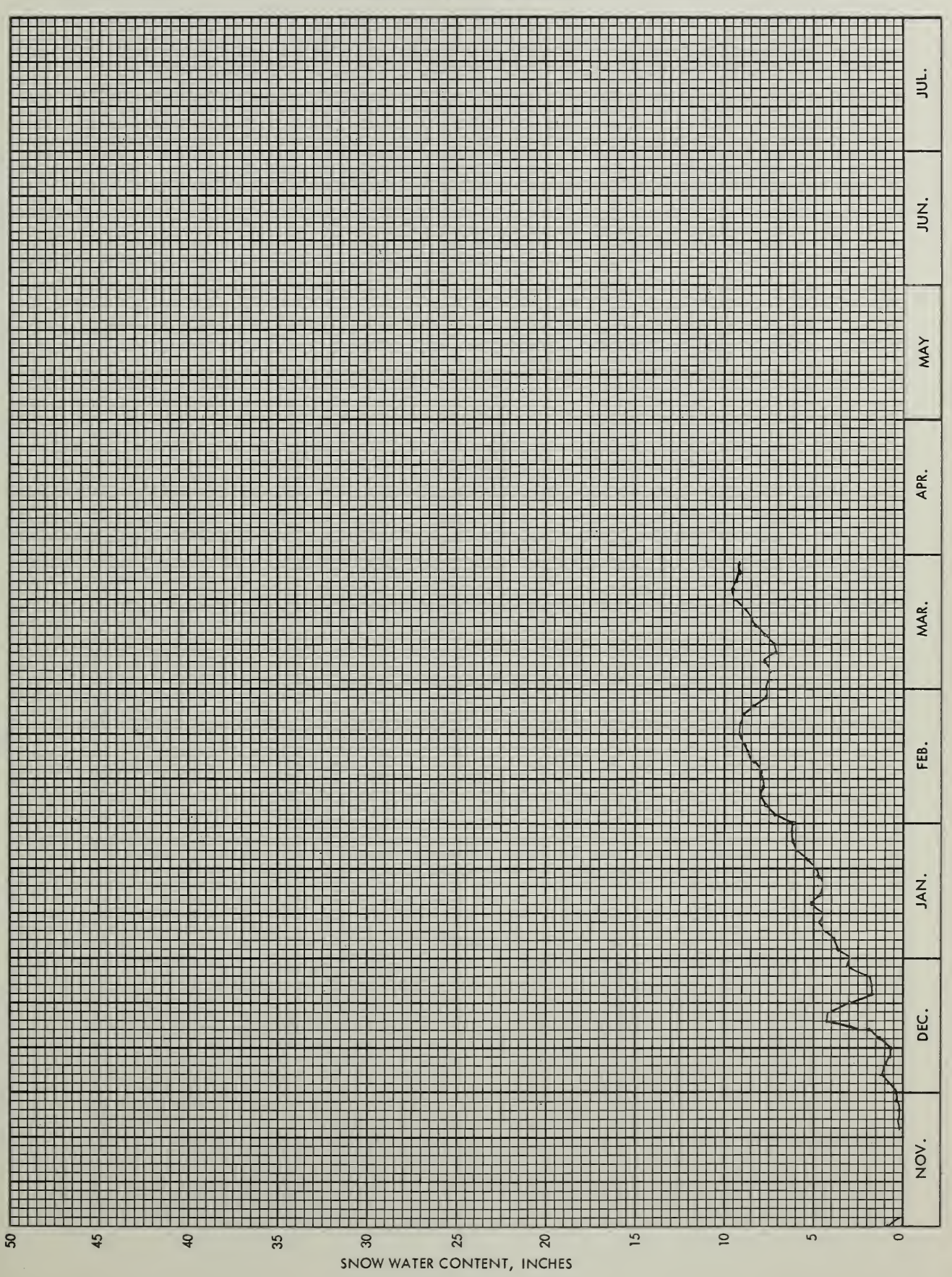
SNOW PILLOW DATA

1972 - 1973

Cougar Mountain - FS

Sec. 21 T. 21N R. 9E No. 21B42SP Drainage: Green River

Lat. 47° 17' Long. 121° 40' Elev. 3200'



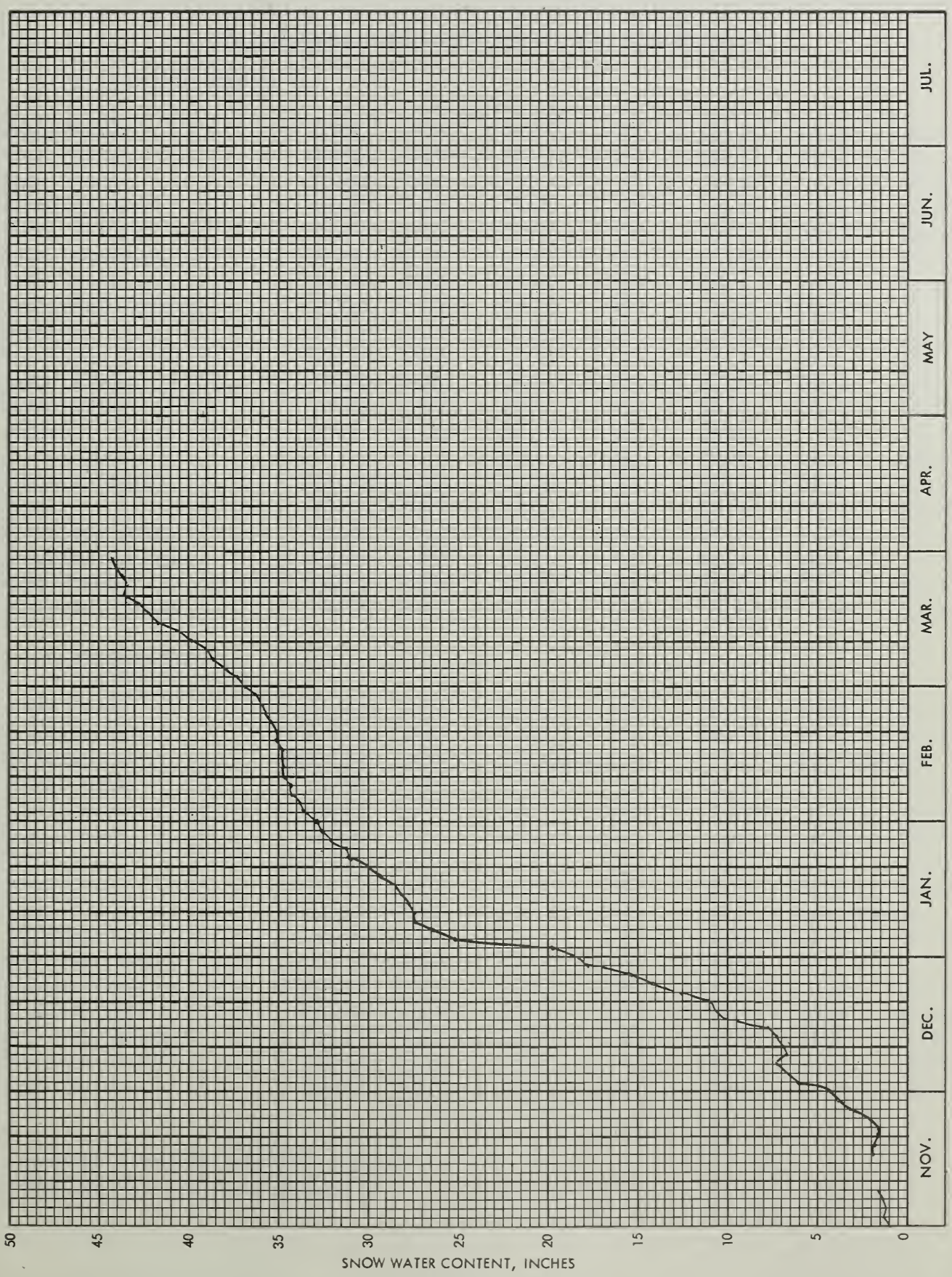
SNOW PILLOW DATA

1972 - 1973

Snowshoe Butte - FS

Sec. 28 T. 21N R. 9E No. 21B43SP Drainage: Green River

Lat. 47° 13' Long. 121° 22' Elev. 5000'



SNOW DATA TO APRIL 1, 1973 - APPENDIX 1

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
UPPER COLUMBIA DRAINAGE							
PEND OREILLE RIVER							
Baree Creek	15B11	5500	4/2	77	31.1	68.9	49.6
Baree Midway	15B16	4600	4/2	62	24.4	52.3	- -
Baree Trail	15B15	3800	4/2	0	0.0	8.8	7.8
Benton Meadow	16A02	2344	3/29	0	0.0	0.0	3.2
Benton Spring	16A03	4900	3/29	39	14.4	18.2	20.8
Boyer Mountain	17A02	5250	3/29	62	22.4	26.0	27.9
Brush Creek	14A04	5000	3/27	28	8.1	14.5	13.1
Bunchgrass Meadow	17A01	5000	3/30	72	28.0	32.8	31.8
Chewelah	17A04	4923	3/28	42	13.2	13.1	19.2
Heart Lake Trail	14C10	4800	3/28	27	9.2	39.4	23.0
Hoodoo Basin	15C10	6000	3/28	93	35.4	80.8	54.5
Hoodoo Creek	15C01	5900	3/28	88	33.4	78.3	50.6
Lookout	15B02	5250	3/15	63	20.0	- -	- -
			3/30	59	20.8	54.5	38.4
Mosquito Ridge	16A04A	5100	3/28	73	28.0	45.6	40.2
Nelson	19-Can	3050	3/28	33	12.4	16.7	15.8*
Schweitzer Bowl	16A06	4500	3/29	60	21.8	31.8	- -
Schweitzer Ridge	16A05	6100	3/29	93	35.5	53.1	- -
Smith Creek	16A01	4800	3/30	95	36.9	56.7	50.1
Winchester Creek	17A03	2970	3/29	13	5.6	7.4	11.3
KETTLE RIVER							
Barnes Creek	90-Can	5300	3/26	58	16.7	25.5	21.5*
Big White Mtn.	154-Can	5500	3/30	55	18.5	23.7	20.0*
Bluejoint Mtn.	244-Can	7500	Not Measured			New Course	
Boulder Road	18A02	1450	3/27	0	0.0	0.0	1.8
Butte Creek	18A03	4070	3/27	26	7.0	6.9	9.9
Cabin Creek	18A08	3170	3/27	17	5.0	6.8	8.9
Carmi	126-Can	4100	3/30	18	5.7	9.0	6.4*
Farron # 1	17-Can	4000	3/28	38	12.7	13.2	13.4*
Farron # 2	243-Can	4000	3/28	36	11.5	New Course	
Goat Creek	18A04	3595	3/27	9	2.8	1.7	6.5*
Graystoke Lake	5-Can	5950	3/23	59	18.6	28.5	- -
Monashee Pass	48A-Can	4500	3/26	49	11.6	17.8	14.1*
Old Glory Mtn.	42-Can	7000	3/31	77	29.5	33.6	27.5*
Snow Caps Creek	18A05	2150	3/27	0	0.0	0.0	1.9
Snow Caps Trail	18A06	2720	3/27	2	0.6	2.5	5.7
Summit G. S.	18A07	4600	3/27	25	6.8	- -	9.6

Average based on 1953-67 average
* Average for years of record

USDA SCS-PORTLAND, OREGON 1973.

SNOW DATA TO APRIL 1, 1973 - APPENDIX 2

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average#
KETTLE RIVER (Cont.)							
Trapping Creek Lower	166-Can	3050	3/30	0	0.0	6.2	3.7*
Trapping Creek Upper	165-Can	4450	3/30	18	5.7	11.6	9.5*
COLVILLE RIVER							
Baird	17A06	3215	3/30	6	2.3	0.0	6.4
Carlson	18A09	2885	3/29	0	0.0	0.0	2.7
Chewelah	17A04	4925	3/28	42	13.2	13.1	19.2
Stranger Mountain	17A05	4990	3/28	33	11.0	6.8	14.3
Togo	18A10	3370	3/29	18	6.5	10.4	11.2
SPOKANE RIVER							
Above Burke	15B08	4100	3/30	31	10.6	35.6	25.0
Above Roland	15B07	4350	3/28	42	16.5	52.8	34.8
Below Roland	15B06	3770	3/28	8	3.1	21.8	17.0
Copper Ridge	16B02	4800	3/29	32	11.2	38.6	31.1
Forty-nine Meadows	15B03	5000	3/28	48	17.5	42.3	36.1
Fourth of July Summit	16B03	3100	3/15	6	2.6	9.4	- -
			3/28	0	0.0	5.4	11.2
Granite Peak	15B13A	6000	3/28	91	31.7	71.6	51.2
Kellogg Peak	16B05A	5560	3/28	52	18.9	50.2	33.5
Lookout	15B02	5250	3/15	63	20.0	- -	- -
			3/30	59	20.8	54.5	38.4
Lost Lake	15B14A	6000	3/28	100	36.9	85.7	66.2
Lower Sands Creek	16B01	3400	3/29	25	8.4	27.9	21.0
Medicine Ridge	15B04A	6150	3/28	86	30.2	63.2	- -
Mosquito Ridge	16A04A	5110	3/28	73	28.0	45.6	40.2
Outlaw Creek	15B12A	3750	Discontinued			18.5	17.8
Roland Summit	15B05A	5200	3/28	58	21.5	67.1	41.2
Sherwin	16C01	3200	3/29	13	4.4	21.7	16.6
Sunset	15B09A	5600	3/28	58	20.7	53.8	35.6
SANPOIL RIVER							
Sherman Creek Pass	18A01	5350	3/30	41	12.8	12.7	15.2
OKANOGAN RIVER							
Aberdeen Lake	6-Can	4300	3/30	21	5.4	7.5	6.2*
Blackwall Peak	100-Can	6250	4/2	65	25.2	56.9	36.0*
Bouleau Creek	31-Can	5000	4/1	33	9.9	15.8	12.1*

Average based on 1953-67 average

USDA-SCS-PORTLAND, OREGON 1973.

SNOW DATA TO APRIL 1, 1973 - APPENDIX 3

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
OKANOGAN RIVER (Cont.)							
Bouleau Lake	234-Can	4580	3/25	45	10.8	18.3	- -
Brenda Mine	193-Can	4800	3/15	39	10.3	- -	- -
			3/26	38	11.8	20.9	14.6*
Brookmere	27-Can	3200	3/31	17	5.2	15.7	10.0*
Carrs Landing Lower	167-Can	2250	3/30	0	0.0	0.0	- -
Carrs Landing Upper	168-Can	3200	3/30	0	0.0	4.0	3.8*
Clark +	19A08a	7000	Not Measured			35.5	23.3*
Enderby	130-Can	6250	3/28	112	34.6	51.8	38.7*
Esperon Creek Lower	164-Can	4400	3/25	33	10.5	15.5	13.4*
Esperon Creek Middle	163-Can	4700	3/25	44	14.1	19.2	16.3*
Esperon Creek Upper	162-Can	5400	3/25	48	14.6	22.1	20.8*
Freezeout Meadows New	20A38	5000	3/29	62	23.7	38.8	- -
Graystoke Lake	5-Can	5950	3/23	59	18.6	28.5	- -
Hamilton Hill	107-Can	4900	3/30	35	11.4	33.5	16.3*
Harts Pass	20A05A	6500	3/28	87	33.3	67.9	46.6
Horseshoe Basin +	19A05a	7000	3/30	46	16.1	29.4	13.5
Isintok Lake	152-Can	5510	3/31	26	6.9	16.7	8.3
Lost Horse Mountain	105-Can	6300	3/29	31	8.2	21.0	9.2*
Loup Loup	19A07	4650	3/29	17	6.0	12.0	8.7
McCulloch	4-Can	4200	3/14	26	6.3	- -	- -
			3/25	21	5.7	8.5	6.7*
Missezula Mountain	106-Can	5100	3/20	30	9.0	20.3	9.2*
Mission Creek	5A-Can	6000	3/27	58	17.5	26.2	20.2*
Monashee Pass	48A-Can	4500	3/26	49	11.6	17.8	14.0*
Mount Kobau	156-Can	5950	3/30	35	10.1	17.4	14.1*
Muckamuck +	19A09a	6390	Not Measured			19.6	17.5
Mutton Creek No. 1	19A01	5700	3/28	38	11.5	24.9	14.1
Mutton Creek No. 2	19A04	6000	3/28	41	11.9	23.0	15.1
Mutton Creek No. 2 SP	19A11SP	6000	3/28	-	8.6	New Course	
New Copper Mountain	46A-Can	4300	3/15	13	3.1	- -	- -
			3/29	12	3.8	11.8	5.4*
New Penticton Res. #2	183-Can	5225	3/29	30	6.9	13.8	9.6*
Nickel Plate Mtn.	47-Can	6200	3/27	24	5.8	15.9	8.0*
Oyama Lake	203-Can	4400	3/28	24	6.1	8.7	8.3*
Paysayten +	20A28a	4300	3/30	30	10.5	27.7	14.9
Postill Lake	55-Can	4500	3/30	30	8.5	11.2	8.9*
Quartette Lake	34-Can	4000	3/27	27	7.9	23.4	16.2*
Rusty Creek	19A03	4000	3/29	13	4.5	8.1	7.0
Salmon Meadows	19A02	4500	3/28	26	7.7	12.4	10.6
Silver Star Mountain	99-Can	6050	4/1	74	27.0	41.0	27.8*
Starvation Mtn +	19A10a	6750	Not Measured			25.5	22.7
Summerland Reservoir	3A-Can	4200	3/14	26	6.7	- -	- -
			4/1	26	7.7	15.3	9.0*
Touts Coulee	19A06	2845	3/30	0	0.0	1.9	0.7

\# Average based on 1953-67 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND, OREGON 1973.

SNOW DATA TO APRIL 1, 1973 - APPENDIX 4

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
OKANOGAN RIVER (Cont.)							
Trout Creek	3-Can	4700	3/27	24	6.8	15.6	7.2*
Vaseux Creek	233-Can	4600	4/1	21	4.6	9.4	9.3*
White Rocks Mountain	70-Can	6000	Late Report		.	33.6	22.9*
ENTIAT RIVER							
Blue Creek G. S.	20B28a	5425	3/28	72	28.1	New Course	
Entiat Meadows +	20A33a	4800	3/28	90	35.1	67.6	50.6
Entiat River Trail +	20A34a	3150	3/28	22	8.6	27.8	22.7
Four Mile Ridge +	20B27a	7000	3/28	60	23.4	55.2	- -
Fox Camp +	20A36a	6510	3/28	110	42.9	83.7	61.9
Pope Ridge	20B20	4300	3/29	24	9.3	26.0	20.2
Pugh Ridge +	20A32a	6400	3/28	70	27.3	60.3	40.6
Shady Pass	20A37	5000	3/30	54	21.3	52.8	- -
Snow Brushy +	20A35a	3850	3/28	65	25.4	51.0	43.9
Tommy Creek +	20B21a	5300	3/28	40	15.6	38.6	28.2
METHOW RIVER							
Dollar Watch +	20A29a	7000	3/30	68	23.8	47.9	27.6
Harts Pass	20A05A	6500	3/28	87	33.3	67.9	46.6
Horseshoe Basin +	19A05a	7000	3/30	46	16.1	29.4	13.5
Loup Loup	19A07	4650	3/29	17	6.0	12.0	8.7
Mutton Creek No. 1	19A01	5700	3/28	38	11.5	24.9	14.1
Mutton Creek No. 2	19A04	6000	3/28	41	11.9	23.0	15.1
Mutton Creek No. 2 SP	19A11SP	6000	3/28	-	8.6	New Course	
Rusty Creek	19A03	4000	3/29	13	4.5	8.1	7.0
Salmon Meadows	19A02	4500	3/28	26	7.7	12.4	10.6
War Creek Pass +	20A31a	6500	3/30	84	29.4	2/	43.1
CHELAN LAKE BASIN							
Cloudy Pass +	20A22a	6500	3/22	92	35.0	- -	- -
Greenwood Flat +	20A25a	3540	3/22	45	17.1	- -	- -
Little Meadows +	20A24a	5275	3/22	94	35.7	- -	- -
Lyman Lake	20A23A	5900	3/22	119	43.3	106.3	58.5
Park Creek Ridge	20A12A	4600	3/27	83	31.6	65.4	46.5
Rainy Pass	20A09	4780	3/28	82	30.8	65.6	41.2
Safety Harbor	20A30A	6300	3/26	62	21.5	49.5	29.4
War Creek Pass +	20A31a	6500	3/30	84	29.4	2/	43.1

\# Average based on 1953-67 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation
2/ Aerial Marker buried

USDA-SCS-PORTLAND, OREGON 1973-

SNOW DATA TO APRIL 1, 1973 - APPENDIX 5

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
WENATCHEE RIVER							
Berne-Mill Creek	21B23	2925	3/29	39	16.8	46.0	27.5
Berne-Mill Creek New SP	21B41SP	3240	3/29	30	12.8	30.8	- -
Blewett Pass No. 2	20B02	6270	3/29	20	7.4	34.3	16.1
Chiwaukum G. S.	20B16	1810	3/29	0	0.0	20.6	9.6
Fish Lake	21B04	3371	3/27	43	17.9	59.4	35.4
Lake Wenatchee	20B05	1970	3/29	4	2.1	24.1	11.1
Leavenworth R. S.	20B17	1127	3/13	0	0.0	- -	- -
			3/30	0	0.0	2.0	- -
Lyman Lake	20A23A	5900	3/22	119	43.3	106.3	58.5
Merritt	20B18	2140	3/29	8	4.1	27.6	14.2
Stevens Pass	21B01	4070	3/14	90	34.0	85.1	49.7
			3/29	83	35.0	87.0	54.1
Stevens Pass Sand Shed	21B45	3700	3/14	57	20.3	56.1	- -
			3/29	52	20.8	56.0	- -
SQUILCHUCK CREEK							
Beehive Springs	20B03	4400	3/29	15	6.2	9.9	7.7
Scout-A-Vista	20B04	3400	3/29	10	4.2	10.5	6.4
STEMILT CREEK							
Jump-Off	20B08	4450	3/28	16	6.0	12.6	7.3
Stemilt Slide	20B06	5000	3/28	26	9.0	22.6	13.3
Upper Wheeler	20B07	4400	3/28	13	5.7	13.1	8.3
COLOCKUM CREEK							
Colockum Creek Upper	20B22	5300	3/28	26	10.0	21.5	- -
Colockum Creek Lower	20B23	4300	3/28	14	5.8	13.0	- -
YAKIMA RIVER							
Ahtanum R. S.	21C11	3100	3/29	0	0.0	4.3	4.9
Big Boulder Creek	21B09	3200	3/27	20	7.1	32.4	18.7
Blewett Pass No. 2	20B02	4270	3/29	20	7.4	34.3	16.1
Bumping Lake	21C08	3450	3/14	22	7.9	22.6	16.9
			3/29	17	6.6	20.5	16.8
Bumping Lake New	21C36	3400	3/14	28	10.5	28.9	19.9
			3/29	23	8.8	26.6	17.2
Cayuse Pass	21C06	5300	3/30	135	54.5	128.2	91.2

Average based on 1953-67 average

USDA-SCS-PORTLAND, OREGON 1973-

SNOW DATA TO APRIL 1, 1973 - APPENDIX 6

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches) Last Year	Water Content (inches) Average #
YAKIMA RIVER (Cont.)							
Colockum Pass	20B09	5370	4/3	33	11.1	26.0	18.6
Cooke Creek	20B10	4123	3/30	0	0.0	11.9	5.5
Corral Pass	21C13	6000	3/31	71	32.5	69.0	41.7
Fish Lake	21B04	3371	3/27	43	17.9	59.4	35.4
Green Lake	21C10	6000	3/29	59	23.0	54.5	33.2
Grouse Camp	20B11	5385	3/29	34	11.0	30.3	18.2
High Creek	20B12	2930	3/29	0	0.0	11.2	0.9
Joe Lake	21B46a	4624	3/28	106	42.4	- -	- -
Lake Cle Elum	21B14M	2200	3/15	0	0.0	24.4	11.0
			3/30	0	0.0	16.5	5.7
Lemah Creek +	21B47a	3327	3/28	78	31.2	59.0	- -
Manashtash	20C01	3935	3/28	0	0.0	0.0	1.8
Morse Lake	21C17	5400	3/29	102	42.8	69.4	62.0
Nanum	21B39	2340	3/29	11	4.1	14.6	8.0
Olallie Meadows	21B02	3625	3/29	50	19.6	81.7	51.3
Satus Pass	20D01	4030	3/29	0	0.0	8.3	12.1
Stampede Pass	21B10	3000	3/15	-	26.0	46.2	45.2
			4/2	-	27.2	46.7	48.8
Trail Creek	20B14	3360	3/20	0	0.0	0.0	- -
Tunnel Avenue	21B8	2450	3/13	29	9.2	38.6	25.2
			3/30	21	8.2	36.0	25.9
Van Epps Pass +	20B26a	5925	Not Measured			- -	- -
			3/28	91	36.4	105.6	- -
Walters Flat	20B15	3360	3/29	0	0.0	11.0	4.9
Waptus Lake +	21B49a	3024	3/28	61	24.4	64.8	- -
White Pass (E. Side)	21C28	4500	3/15	34	11.1	51.6	24.4
			3/28	34	11.9	48.3	26.6
White Pass (L. Lake)	21C27	4500	3/28	33	14.4	52.4	32.6
AHTANUM CREEK							
Ahtanum R. S.	21C11	3100	3/29	0	0.0	4.3	4.9
Green Lake	21C10	6000	3/29	59	23.0	54.5	33.2
L O W E R C O L U M B I A							
ASOTIN CREEK							
Spruce Springs	17C04	5700	3/26	41	14.2	35.8	- -

Average based on 1953-67 average
+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND, OREGON 1973.

SNOW DATA TO APRIL 1, 1973 - APPENDIX 7

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
MILL CREEK							
Homestead	17A01	4030	3/28	6	2.4	7.8	7.9
Martin Springs	17C02	4400	3/28	13	5.2	19.5	14.5
Tollgate	18D3M	5070	3/29	39	15.0	33.6	25.9
KLICKITAT RIVER							
Satus Pass	20D01	4030	3/29	0	0.0	8.3	12.1
WHITE SALMON RIVER							
Cultus Creek	21C12	4000	3/28	62	24.7	66.3	49.7
Surprise Lakes	21C13A	4250	3/28	56	22.3	80.7	54.8
WIND RIVER							
Old Man Pass	21D19	3100	3/28	11	4.4	25.2	20.7
LEWIS RIVER							
Blue Lake +	21C22a	4800	3/28	132	50.2	130.0	84.2
Bob's Trail	21C21	2200	3/28	0	0.0	22.1	13.8
Calamity Ridge +	22D1a	2500	3/28	0	0.0	5.4	- -
Council Pass +	21C18a	4200	3/28	56	23.5	64.2	42.6
Cultus Creek	21C12	4000	3/28	62	24.7	66.3	49.7
Divide Meadow +	21C29a	5600	3/28	84	31.9	102.0	60.0
Grand Meadow	21C25	3500	3/28	26	11.0	38.2	29.0
Lone Pine Shelter	21C26	3800	3/30	57	21.4	56.3	43.2
Marble Mountain +	22C05a	3200	3/28	28	13.2	45.2	40.2
Mosquito Meadows	21C19	4100	3/30	60	22.6	58.6	47.4
New Muddy River	22C06	1400	3/28	0	0.0	5.7	10.8
Old Man Pass	21D19	3100	3/28	11	4.4	25.2	20.7
Plains of Abraham +	22C1a	4400	3/28	120	44.4	90.0	70.2
Smith Creek Road	22C04	2100	3/28	0	0.0	21.9	17.2
Spencer Meadow +	21C20a	3400	3/28	22	9.2	29.8	25.6
Surprise Lakes	21C13A	4250	3/28	56	22.3	80.7	54.8
Table Mountain +	21C24a	4200	3/28	70	28.0	66.6	49.2
Timbered Peak +	21D18a	3000	3/28	6	2.5	10.8	23.7

Average based on 1953-67 average
\+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND, OREGON 1973-

SNOW DATA TO APRIL 1, 1973 - APPENDIX 8

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
COWLITZ RIVER							
Cayuse Pass	21C06	5300	3/30	135	54.5	128.2	91.2
Mosquito Meadows	21C19	4100	3/30	60	22.6	58.6	47.4
Ohanapecosh	21C32	2200	3/28	0	0.0	27.9	16.4
Packwood Lake	21C31	2870	3/30	0	0.0	27.9	13.5
Pigtail Peak	21C33	5900	3/15	96	37.0	110.3	63.3
			3/28	96	37.8	104.3	72.9
Plains of Abraham +	22C01a	4400	3/28	120	44.4	90.0	70.2
Potato Hill	21C14	4500	3/30	46	17.9	50.1	33.0
White Pass (E. Side)	21C28	4500	3/15	34	11.1	51.6	24.4
			3/28	34	11.9	48.3	26.6
White Pass (L. Lake)	21C27	4500	3/28	33	14.4	52.4	32.6
Willame Creek	21C30	3250	3/30	36	13.8	45.0	35.0
PUGET SOUND DRAINAGE							
NISQUALLY RIVER							
Ghost Forest	21C04	4550	3/27	65	25.7	84.5	50.1
Longmire	21C03	2760	3/27	0	0.0	21.8	10.6
New Paradise Park	21C35	5500	3/27	118	48.6	124.6	73.9
Stem Glade	21C01	5050	3/27	107	42.6	116.1	74.4
WHITE RIVER							
Cayuse Pass	21C06	5300	3/30	135	54.5	128.2	91.2
Corral Pass	21C13	6000	3/31	71	32.5	69.0	41.7
Morse Lake	21C17	5400	3/29	102	42.8	69.4	62.0
GREEN RIVER							
Airstrip	21B24	1800	3/28	0	0.0	2.5	- -
Charley Creek	21B25	1200	3/28	0	0.0	0.0	- -
Cougar Mountain SP	21B42SP	3200	3/29	12	5.0	25.6	- -
Grass Mtn. No. 2	21B27	2900	3/28	28	10.7	35.4	26.1
Grass Mtn. No. 3	21B28	2100	3/28	0	0.0	8.1	- -
Lester Creek	21B29	3100	3/28	34	12.7	41.1	28.7
Lynn Lake	21B50	4000	3/28	28	10.7	41.2	- -
Sawmill Ridge	21B29	4700	3/28	56	19.7	66.6	46.0
Snowshoe Butte SP	21B43SP	5000	3/29	88	38.2	96.2	- -

Average based on 1953-67 average
\+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND, OREGON 1973.

SNOW DATA TO APRIL 1, 1973 - APPENDIX 9

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average#
GREEN RIVER (Cont.)							
Stampede Pass SP	21B10	3860	3/15	-	26.0	46.2	45.2
			4/2	-	27.2	46.7	48.8
Twin Camp	21B30	4100	3/28	40	15.3	37.2	31.0
CEDAR RIVER							
City Cabin	21B03	2390	3/27	8	3.0	26.2	18.3
Mt. Gardner	21B21	3300	3/27	0	0.0	22.0	19.8
Mt. Lindsay	21B16	2500	3/30	15	5.7	24.1	17.7
Mt. Washington New	21B50	3000	3/30	0	0.0	New Course	
Rex River	21B17	2400	3/30	14	4.8	28.5	19.8
S. F. Cedar	21B06	3000	3/27	15	5.6	35.5	24.8
Tinkham Creek	21B20	3400	3/27	21	6.5	36.9	23.2
SNOQUALMIE RIVER							
Alpine Meadow	21B48	3500	3/29	71	25.9	62.9	- -
Lake Elizabeth	21B19	2900	3/28	53	19.7	71.2	46.9
Olallie Meadows	21B02	3625	3/29	50	19.6	81.7	51.3
S. F. Tolt	21B18	1900	3/29	0	0.0	0.0	- -
SKYKOMISH RIVER							
Lake Elizabeth	21B19	2900	3/28	53	19.7	71.2	46.9
Stevens Pass	21B01	4070	3/14	90	34.0	85.1	49.7
			3/29	83	35.0	87.0	54.1
Stevens Pass S. Shed	21B45	3700	3/14	57	20.3	56.1	- -
			3/29	52	20.8	56.0	- -
SKAGIT RIVER							
Beaver Creek Trail	21A06	2200	3/28	8	3.6	19.9	13.6
Beaver Pass	21A01	3680	3/29	51	19.0	49.7	35.6
Brown Top Ridge	21A28a	6000	3/29	126	50.0	97.2	- -
Cloudy Pass	20A22a	6500	3/22	92	35.0	- -	- -
Devils Park	20A04	5900	3/28	86	34.0	69.9	46.0
Freezeout Cr. Trail	20A01	3500	3/29	24	9.2	21.3	13.4
Freezeout Meadows New	20A30	5000	3/29	62	23.7	38.8	- -

Average based on 1953-67 average

USDA-SCS-PORTLAND, OREGON 1973-

SNOW DATA TO APRIL 1, 1973 - APPENDIX 10

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average#
SKAGIT RIVER (Cont.)							
Granite Creek	21A29	3500	3/28	32	11.4	31.4	- -
Harts Pass	20A05A	6500	3/28	87	33.3	67.9	46.6
Hozomeen Lake	21A02	2600	3/29	7	3.1	13.4	10.4
Klesilkwa	35B-Can	3700	3/30	20	6.8	31.1	15.6*
Lyman Lake +	20A23A	5900	3/22	119	43.3	106.3	58.5
Meadow Cabins	20A08	1900	3/28	2	1.0	14.4	7.5
New Hozomeen Lake	21A30	2800	3/29	17	6.6	17.5	- -
New Tashme	26A-Can	2500	4/1	3	1.5	23.1	11.9*
Quartette Lake	34-Can	4000	3/27	27	7.9	23.4	16.2*
Rainy Pass	20A09	4780	3/28	82	30.8	65.6	41.2
Thunder Basin	20A07	4200	3/28	50	15.5	35.8	25.8
BAKER RIVER							
Dock Butte	21A11A	3800	3/31	134	56.2	100.0	81.0
Easy Pass	21A07A	5200	4/1	153	61.7	119.4	96.7
Jasper Pass	21A06A	5400	3/29	169	69.4	112.3	103.6
Komo Kulshan	21A17	800	3/30	0	0.0	15.8	- -
Marten Lake	21A09A	3600	4/1	142	59.8	110.8	88.2
Mount Blum +	21A18a	5800	Not Measured			86.4	- -
Panorama New	21A26	4300	3/15	128	55.1	98.3	- -
			4/2	132	59.3	99.5	- -
Rocky Creek	21A12A	2100	3/30	41	16.9	39.4	30.5
Schreibers Meadow	21A10A	3400	3/31	112	47.2	84.5	73.3
S. F. Thunder Creek	21A14A	2200	3/30	0	0.0	9.1	5.3
Sulphur Creek	21A13	1600	3/30	4	2.2	22.7	13.7
Three Mile Creek	21A15	4500	3/30	0	0.0	2.4	- -
Watson Lakes	21A08A	4500	3/31	127	47.8	103.5	78.2
NOOKSACK RIVER							
Bald Mountain +	21A19a	4400	3/29	99	44.6	92.3	- -
Canyon +	21A20a	5100	3/29	136	61.2	2/	- -
Glacier Creek	21A23	3700	3/30	42	15.1	36.9	- -
Panorama New	21A26	4300	3/15	128	55.1	98.3	- -
			4/2	132	59.0	99.5	- -
Twin Lakes +	21A21a	5200	3/29	161	72.4	2/	- -

Average based on 1953-67 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation
2/ Aerial Marker buried

WSFB-X4-L

SNOW DATA TO APRIL 1, 1973 - APPENDIX 11

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average #
OLYMPIC PENINSULA							
DUNGENESS RIVER							
Deer Park	23B04	5200	3/26	49	16.9	28.1	26.4
MORSE CREEK							
Cox Valley	23B14	4500	3/31	82	31.1	45.3	- -
ELWHA RIVER							
Hurricane	23B03	4500	3/31	49	16.5	29.9	29.3
SKOKOMISH RIVER							
Black & White	23B07	4200	3/28	85	32.2	52.2	47.9
Black & White Lakes	23B06	4700	3/28	118	52.3	84.4	67.3
Four Streams	23B10	3000	3/28	51	20.1	31.4	- -
Home Sweet Home	23B05	5200	3/28	150	62.5	104.7	81.9
SOLEDUCK RIVER							
Deer Lake	23B01	3900	Not Measured				

Average based on 1953-67 Average

Agencies Assisting with Snow Surveys

GOVERNMENT AGENCIES

Canada:

Department of Lands, Forests and Water Resources,
Water Resources Service, British Columbia

States:

Washington State Department of Ecology
Washington State Department of Natural Resources

Federal:

Department of the Army
Corps of Engineers
U. S. Department of Agriculture
Forest Service
U. S. Department of Commerce
NOAA, National Weather Service
U. S. Department of the Interior
Bonneville Power Administration
Bureau of Reclamation
Geological Survey
National Park Service

PUBLIC AND PRIVATE UTILITIES

Chelan County P.U.D.
Pacific Power and Light Company
Puget Sound Power and Light Company
Washington Water Power Company

OTHER PUBLIC AGENCIES

Okanogan Irrigation District
Wenatchee Heights Irrigation District

MUNICIPALITIES

City of Tacoma
City of Seattle

Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
ROOM 360, U.S. COURT HOUSE
SPOKANE WASHINGTON 99201

FEDERAL - STATE - PRIVATE

COOPERATIVE SNOW SURVEYS

Furnishes the basic data necessary for forecasting water supply for irrigation, domestic and municipal water supply, hydro-electric power generation, navigation, mining and industry

"The Conservation of Water begins with the Snow Survey"